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Galaxy

MAGAZINE

SCIENCE FICTION

NOVELETTE
THE GOD MACHINE
David Gerrold

A STYLE IN TREASON
James Blish

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SCIENCE FICTION

MAGAZINE

ALL STORIES NEW



Galaxy is published in French, German, Italian, Japanese and Spanish. The U. S. Edition is published in Braille and Living Tape.

GALAXY

May, 1970

Vol. 30, No. 2

NOVELETTES

A STYLE IN TREASON	4
James Blish	
THE GOD MACHINE	46
David Gerrold	
WHATEVER BECAME OF THE MCGOWANS?	109
Michael G. Coney	

SERIAL (Part II)

THE TOWER OF GLASS	86
Robert Silverberg	

SHORT STORIES

NEUTRON TIDE	82
Arthur C. Clarke	
TIMESERVER	99
Avram Davidson	

ILLUSTRATED FEATURE

SUNPOT	126
Vaughn Bodé	

FEATURES

EDITOR'S PAGE	2
GALAXY BOOKSHELF	106
Algis Budrys	
OVERKILL	130
Frederik Pohl	
GALAXY STARS	133

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GALAXY MAGAZINE is published monthly by Universal Publishing & Distributing Corporation, Arnold E. Abramson, President. Main offices: 235 East 45 Street, New York, N.Y. 10017. 60¢ per copy, 12-issue subscription, \$6.00 in the United States, elsewhere \$7.00. Second class postage paid at New York, N.Y. and additional mailing offices. Copyright © 1970 by Universal Publishing & Distributing Corporation under International, Universal and Pan-American Copyright Conventions. All rights reserved. The publisher assumes no responsibility for unsolicited material. All stories printed in this magazine are fiction and any similarity between characters and actual persons is coincidental. Title registered U.S. Patent Office. Printed in U.S.A.

THE DDTs

Like it or not, right or wrong, if you're a reasonably constant reader of this magazine and others who strive in the field, you're head-conscious. You spend some time upstairs. You think or try to.

Let's also assume that you're free of irrelevant hang-ups—hair on other people doesn't bother you and miniskirts on pretty girls are out of sight unless you're trying to think of something else. You don't buy everything that's advertised, don't think that baldness, skin color or complexion necessarily denote virility or lack of it and your God is not a panhandler.

So then you look around for the next thing. And somebody points a finger at you and says you've got DDT.

So it could have been malaria—but you don't say so because with your luck it might not have been. When you think of all the vicissitudes your particular genetic material has survived since the first DNA was knocked up in some unimaginable dawn of life you might count yourself pretty lucky.

A born gambler.

But now you have the DDTs—along with everyone else alive today, according to some scientific authority. The stuff has even been found in the tissue of animals native to and living in Antarctica.

Certainly you share it with millions—one official estimate places

the figure at a billion—of your fellow humans, approximately one-third of whom live in malaria-susceptible areas, who have been spared the disease because of effective DDT spraying of mosquito breeding grounds. DDT applications have reduced malarial deaths in India from an annual 750,000 to about 1,500 and have virtually eliminated the disease in Greece, which fifteen years ago reported a million cases in a single year. DDT has boosted food crops and reduced starvation world wide.

To date no one has charged that a single human being has died from the proper use of DDT. Substantial scientific opinion discounts any dangerous effects from the amounts you and I have ingested; there is disagreement on that subject, but it's at least arguable that the total human environment has been improved in this instance.

No one denies the dangers of air- water- and soil-pollution but you and I would rather drive, ride a bus or a plane than walk. We prefer an electric light at home or in the operating room to candle-power. We like central heating and would starve without refrigeration. More details on this at a later date—but the point is that for right now and the foreseeable future *we've become our own environment.*

There is no other worth mentioning. And I'm not about to tell either of us what to do about it. Nor, if past history is any criterion, is anyone else. Lots of luck.

—JAKOBSSON



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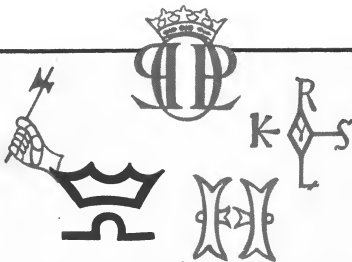




A STYLE IN TREASON

JAMES BLISH

**Realistically, all things on
Earth are for sale and those
who will not sell or cannot
sell find themselves poor!**



The man you have bought may not stay bought but you can keep books on him and put paid to him.

The man who works for you because he believes in you is a fool and will change his mind tomorrow.

The apprentice Guildsman will often hear asked: How can a system based on treason possibly work? His first duty is to conceal that it does.

To conceal from a man his own nature is the easiest of all tasks and the basis of civilized intercourse.

—MAXIMS OF LORD GRO

The Green Exarchy is generally known to be older than man, but nobody knows man's age. Time is relative; and what with the distortions of interstellar travel, the welter of galactic languages, the different stages of history to be found on every world, the bad communications, and the indifference fostered by longevity, no one can say with confidence even what today's date might be, no, not within a year.

We may guess, however, that man discovered the Imaginary Drive about four thousand years ago, and emerged from UrSpace to find the Exarchy, or its parent empires, already established. The Exarchy to-

day consists exclusively of non-human races and is still one of the two major centers of power in the galaxy. It is thought to be a tyranny, but the applicability of so anthropocentric a word to a non-human political system is dubious; indeed, we cannot be sure that the Exarchy is a "political" system, except externally.

The second major power center is the loose and shifting confederation of planets dominated by High Earth. These are predominately human or humanoid in population. The reader will be familiar with a number of these and is doubtless living on one.

Both systems constantly contend for the independent planets. Of these there are two types. Those populated mainly or entirely by humans are ex-colonies which broke free of High Earth in the past or were forgotten: these may also bear enclaves of humanoid or non-human aborigines. Those populated mainly by humanoid or non-human peoples are products of independent evolution; a few also tolerate human enclaves.

The independent planets are almost invariably divided into nation-states. Once such a planet develops a world government, it tends to gravitate, or be forced, into one of the main power systems.

Incessant intrigue is therefore the social norm alike upon the independent planets and upon those dominated by High Earth, and has quasi-official status through the Traitors' Guild, an institution now perhaps a thousand years old (or so it claims). Little is known, necessarily, of the policy of the Guild. Operationally, it has not been above selling an occasional planet to the Green Exarch, but seems firmly to oppose anyone else's doing so. Its methods are deliberately enshrouded in rumor, but in general, seem to place a very high value upon expertise and tradition.

If a social norm prevails under the Exarch, other than the will or policy of the Exarch itself, no official knowledge of it exists.

—*A Child's Guide to the Galaxy*, II:4-5

LISTENING automatically for the first sound of possible interruption, Simon de Kuyl emptied his little poisons into the catch basin in his room and ironically watched the wisps of wine-colored smoke rise from the corroded maw of the drain. He was sorry to see them go—they were old though venomous friends.

He knew without vanity—it was too late for that—that High Earth had no more distinguished a traitor than he. But after only four clockless days on Boadicea he had already found it advisable to change his name, his methods and his residence. It made a humiliating beginning.

The almost worn-away legend on the basin read: Julius, Boadicea. Objects made on this planet were usually labeled that generally, as though any place in the world were like every other. But this both was and was not true. The present city, Druidsfall, was the usual low jumble of decayed masonry, slightly less ancient slums and blank-faced offices, but the fact that it was also the center of the treason industry—hence wholly inconvenient for Simon—gave it character. The traitors had an architectural style of their own, characterized by structures put together mostly of fragmented statues and petrified bodies fitted like puzzle pieces or maps. Traitors on Boadicea had belonged to an honored social class for seven hundred years and their edifices made the fact known.

Luckily, custom allowed Simon to stay clear of these buildings after the first formalities and seek out his own bed and breakfast. In the old friendly inns of Druidsfall the anonymous thumps of the transients—in death, love or trade—are said to make the lodgers

start in their beds with their resident quilts. Of course all inns are like that—but nevertheless, that is why the traitors like to quarter there, rather than in the Traitors' Halls. The inns guarantee them privacy and at the same time help them to feel alive. There is undoubtedly something inhibiting about trying to deal within walls pieced together of broken stone corpses.

Here, in The Skopolamander, Simon awaited his first contact. This—now that he had dumped his poisons—would fall at the end of his immunity period. Quarantine was perhaps a more appropriate term.

No, the immunity was real, however limited, for as a traitor to High Earth he had special status. High Earth, the Boadiceans thought, was not necessarily Old Earth—but not necessarily not, either. For twelve days Simon would not be killed out of sheer conservatism, at least, though nobody would attempt to deal with him, either.

He had three of those days still to run—a dull prospect, since he had already completed every possible preliminary—spiced only by the fact that he had yet to figure out how long a day might be. Boadicea's sun was a ninety-minute microvariable, twinned at a distance of a light-year with a blue-white, Rigel-like star which stood—or had stood throughout historical times—in high southern latitudes. This gave Druids-fall only four consecutive hours of quasi-darkness at a time and even during this period the sky was indigo rather than black at its deepest—and more often than not flaring with auroras. One was lighting the window now, looking like a curtain of orange and hazy blue fire licking upward along a bone trestle.

Everything in the city, as everywhere upon Boadicea, bespoke the crucial importance of fugitive light and the fade-out-fade-in weather that went with it, all very strange after the desert glare of High Earth. The day of Simon's arrival had dawned in mist, which cold gales had torn away into slowly pulsating sunlight. Then had come clouds and rain which had turned to snow and then to sleet—more weather in a day than the minarets of Novoe Jiddah, Simon's registered home town, saw in a six-month. The fluctuating light and wetness were reflected in Druidsfall most startlingly by its gardens, which sprang up when one's back was turned and did not need to be so much weeded as actually fought. They were constantly in motion to the ninety-minute solar cycle, battering their elaborate heads against back walls, which were everywhere crumbling after centuries of such soft, implacable impacts. Half the buildings in Druidsfall glittered with their leaves, which were scaled with so much soft gold that they stuck to anything they were blown against—the wealth of Boadicea was based anciently in the vast amounts of uranium and other power-metals in its soil, from which the plants extracted the inevitable associated gold as radiation shielding for their spuriously tender genes. Everyone one saw in the streets of Druidsfall, or any other such city, was a mutation of some sort—if he were not an outworlder—but after a day in the winds they were all partly yellow, for the gold scales smeared off the flying leaves like butter. Everyone was painted with meaningless riches, the very bedsheets glittered ineradicably with flakes of it and brunettes—especially in the elaborate hair styles of the men—were at a premium.

Simon poured water from an amphora into the basin, which promptly hissed like a dragon just out of the egg and blurted a mushroom of cold blue steam that made him cough.

Careful! Acid after water, never water after acid—I am forgetting the most elementary lessons—I should have used wine. Time for a drink, in Gro's name!

HE CAUGHT up his cloak and went out, not bothering to lock the door. He had nothing worth stealing but his honor, which was in his right hip pocket. Oh, and of course, High Earth—that was in his left. Besides, Boadicea was rich: one could hardly turn around without knocking over some heap of treasures, artifacts of a millennium nobody had sorted for a century or even wanted to be bothered to sort. Nobody would think to steal from a poor traitor any object smaller than a king, or preferably, a planet.

In the tavern below Simon was joined at once by a playwoman.

"Are you buying tonight, Excellence?"

"Why not?"

And in fact he was glad to see her. She was blond and ample, a relief from the sketchy women of the Respectables, whom fashion made look as though they suffered from some nervous disease that robbed them of appetite. Besides, she would exempt him from the normal sort of Boadicean polite conversation, which consisted chiefly of elaborately involuted jokes at which it was considered gauche to laugh. The whole style of Boadicean conversation, for that matter, was

intended to be ignored—gambits were a high art but end-games were a lost one. Simon sighed and signaled for beakers.

"You wear the traitors' clasp," she said, sitting across from him, "but not much tree gold. Have you come to sell us High Earth?"

Simon did not even blink. He knew the query to be a standard opening with any outworlder of his profession.

"Perhaps. But I'm not on business at the moment."

"Of course not," the girl said gravely, her fingers playing continuously with a sort of rosary tasseled with two silver phalluses. "Yet I hope you prosper. My half-brother is a traitor but he can find only small secrets to sell—how to make bombs and the like. It's a thin life. I prefer mine."

"Perhaps he should swear by another country."

"Oh, his country is well worth selling but his custom is poor. Neither buyer nor seller trusts him very far—a matter of style, I suppose. He'll probably wind up betraying some colony for a thousand beans and a highball."

"You dislike the man—or is it the trade?" Simon asked. "It seems not unlike your own, after all. One sells something one never really owned and yet one still has it when the transaction is over—as long as both parties keep silent."

"You dislike women," the girl said, tranquilly, as a simple observation, not a challenge. "But all things are loans—not just chastity and trust. Why be miserly? To 'possess' wealth is as illusory as to 'possess' honor or a woman—and much less gratifying. Spending is better than saving."



"But there are rank orders in all things, too," Simon said, lighting a kief stick. He was intrigued in spite of himself. Hedonism was the commonest of philosophies in the civilized galaxy but it was piquant to hear a playwoman trotting out the moldy clichés with such fierce solemnity. "Otherwise we should never know the good from the bad, or care." "

"Do you like boys?"

"No, that's not one of my tastes. Ah—you will say that I don't condemn boy-lovers and that values are in the end only preferences? I think not. In morals, empathy enters eventually."

"So—you wouldn't corrupt children and torture revolts you. But you were made that way. Some men are not so handicapped. I meet them now and then."

The hand holding the lopped beads made a small, unconscious gesture of revulsion.

"I think they are the handicapped, not I—most planets hang their moral imbeciles, sooner or later. But what about treason? You didn't answer that question."

"My throat was dry—thank you. Treason, well—it's an art, hence again a domain of taste or preference. Style is everything. That's why my half-brother is so inept. If tastes changed he might prosper—as I might had I been born with blue hair."

"You could dye it."

"What, like the Respectables?" She laughed, briefly but unaffectedly. "I am what I am. Disguises don't become me. Skills, yes—those are another matter. I'll show you when you like. But no masks."

Skills can betray you, too . . .

Simon remembered that moment at the Traitors' Guild when his proud sash of poison shells had lost him in an instant every inch of altitude over the local professionals that he had hoped to trade on.

But he only said again, "Why not?"

Testing her skills would be as good a way as any to while away the time—and once his immunity had expired he could never again trust a playwoman on Boadicea.

She proved, indeed, very skillful and the time passed. But the irregular days—the clock in the tavern was on a different time from the one in his room and neither even faintly agreed with his High Earth-based chronometer and metabolism—betrayed him. He awoke one morning/noon/night to find the girl turning slowly black beside him in the last embrace of a fungal toxin he would have reserved for the Emperor of Canes Venatici or the worst criminal in human history.

War had been declared. He had been notified that if he still wanted to sell High Earth, he would have to show first his skill at staying alive against the whole cold malice of all the Traitors of Boadicea.

HE HOLED up quickly and drastically, beginning with a shot of transduction serum—an almost insanely dangerous expedient, for the stuff not only altered his appearance but his very heredity, leaving his head humming with false memories and traces of character derived from the unknowable donors of the serum. These conflicted not only with his purposes but even with his tastes and motives. Under interrogation he would break down into a babbling crowd of

random voices, as bafflingly scrambled as his blood types, his retina prints and fingerprints. To the eye his gross physical appearance would be a vague, characterless blur of many rôles—some of them derived from the DNA of persons who had died a hundred years ago and at least that many parsecs away in space. The danger was that unless he got the antiserum with fifteen days he would first forget his mission, then his skills and at last his very identity. Nevertheless, he judged that the risk had to be taken—for effete though the local traitors seemed to be they were obviously quite capable of penetrating any lesser cover.

The next problem was how to complete the mission itself—it would not be enough just to stay alive. After all, he was still no ordinary traitor or even the usual kind of double agent—his task was to buy Boadicea while seeming to sell High Earth. But beyond that was a grander treason in the making for which the combined Guilds of both planets might only barely be sufficient—the toppling of the Green Exarch, under whose subtle non-human yoke half of humanity's worlds had not even the latter-day good sense to groan. For such a project, the wealth of Boadicea was a prerequisite, for the Green Exarch drew tithes from six fallen empires older than man—the wealth of Boadicea and its reputation as the first colony to break with Old Earth, back in the first days of the Imaginary Drive.

And therein lay the difficulty, for Boadicea, beyond all other colony worlds, had fallen into a kind of autumn cannibalism. In defiance of that saying of

Elva-Tse, the edge was attempting to eat the center. It was this worship of independence, or rather, of autonomy, which had not only made treason respectable but had come nigh to ennobling it—and was now imperceptibly emasculating it, like the statues one saw everywhere in Druidsfall which had been defaced and sexually mutilated by the gray disease of time and the weather.

Today, though all the Boadiceans proper were colonials in ancestry, they were snobs about their planet's prehuman history, as though they had not nearly exterminated the aborigines themselves but were their inheritors. The few shambling Charioteers who still lived stumbled through the streets of Druidsfall loaded with ritual honors, carefully shorn of real power but ostentatiously deferred to on the slightest occasion which might be noticed by anyone from High Earth. In the meantime, the Boadiceans sold each other out with delicate enthusiasm but against High Earth—which was not necessarily Old Earth but not necessarily was not, either—all gates were formally locked.

Formally only, Simon and High Earth were sure, for the hunger of treason, like lechery, tends to grow with what it feeds on—and to lose discrimination in the process. Boadicea, like all forbidden fruits, should be ripe for the plucking for the man with the proper key to its neglected garden.

The key that Simon had brought with him was now lost. He would have to forge another with whatever crude tools could be made to fall to hand. The only one accessible to Simon at the moment was the dead playwoman's despised half-brother.

HIS name, Simon had found easily enough, was currently Da-Ud tam Altair and he was Court Traitor to a small religious principate on the Gulf of the Rood, on the Incontinent, half the world away from Druidsfall. Since one of his duties was that of singing the Rood-Prince to sleep to the accompaniment of a sort of gleeman's harp (actually a Charioteer instrument, ill-adapted to human fingers, and which Da-Ud played worse than most of those who affected it), Simon reached him readily in the guise of a ballad merchant, selling him twelve-and-a-tilly of ancient High Earth songs Simon had made up while in transit to the principate—it was as easy as giving Turkish Delight to a baby.

After the last mangled chord died Simon told Da-Ud quietly, "By the way—well sung, Excellence—did you know that the Guild has murdered your half-sister?"

Da-Ud dropped the fake harp with a noise like a spring toy coming unwound.

"Jillith? But she was only a playwoman! Why, in Gro's name—" Da-Ud caught himself and stared at Simon with sudden, belated suspicion. Simon looked back, waiting.

"Who told you that? Damn you—are you a Torturer? I'm not—I've done nothing to merit—"

"I'm not a Torturer and nobody told me," Simon said. "She died in my bed—as a warning to me."

He removed his clasp from the shoulder of his cloak and clicked it. The little machine flowered briefly into a dazzling actinic glare and then closed again.

While Da-Ud was still covering his streaming eyes Simon said softly. "I am the Traitor-in-Chief of High Earth."

It was not the flash of the badge that was dazzling Da-Ud now. He lowered his hands. His whole narrow body was trembling with hate and eagerness.

"What—what do you want of me, Excellence? I have nothing to sell but the Rood-Prince—and a poor stick he is. Surely you would not sell me High Earth—I am a poor stick myself."

"I would sell you High Earth for twenty riyals."

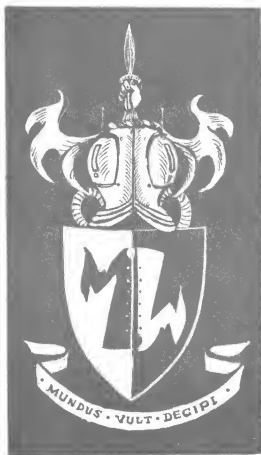
"You mock me."

"No, Da-Ud. I came here to deal with the Guild but they killed Jillith—and that as far as I'm concerned disqualifies them from being treated with as civilized professionals or as human beings at all. She was pleasant and intelligent and I was fond of her—and besides, while I'm perfectly willing to kill under some conditions, I don't hold with throwing away an innocent life for some footling dramatic gesture."

"I wholly agree," Da-Ud said. His indignation seemed to be at least half real. "But what will you do? What can you do?"

"I have to fulfill my mission anyway short of my own death—if I die nobody will be left to get it done. But I'd most dearly love to cheat, dismay, disgrace the Guild in the process if it could possibly be managed. I'll need your help. If we live through it I'll see to it that you'll turn a profit, too. Money isn't my first goal here—or even my second now."

"I'll tackle it," Da-Ud said at once, though he was obviously apprehensive, as was only sensible. "What precisely do you propose?"



"**F**IRST of all I'll supply you with papers indicating that I've sold you a part—not all—of the major thing I have to sell, which gives any man who holds it a lever in the State Ministry of High Earth. They show that High Earth has been conspiring against several major powers, all human, for purposes of gaining altitude with the Green Exarch. They won't tell you precisely which worlds—but there will be sufficient information there so that the Exarchy would pay a heavy purse for them—and High Earth an even heavier one to get them back. It will be your understanding that the missing information is also for sale—but you haven't got the price."

"Suppose the Guild doesn't believe that?"

"They'll never believe—excuse me, I must be blunt—that you could have afforded the whole thing; they'll know I sold you this much of it only because I have a grudge—and you can tell them so, though I wouldn't expose the nature of the grudge if I were you. Were you unknown to them they might assume that you were I in disguise—but luckily they know you, and, ah, probably tend rather to underestimate you."

"Kindly put," Da-Ud said with a grin. "But that won't prevent them from assuming that I know your whereabouts or have some way of reaching you. They'll interrogate for that and, of course, I'll tell them. I know them, too—it would be impossible not to and I prefer to save myself needless pain."

"Of course. Don't risk interrogation at all. Tell them you want to sell me out, as well as the secret. That will make sense to them and I think they must have rules against interrogating a member who offers to sell. Most Traitors' Guilds do."

"True, but they'll observe them only as long as they believe me. That's standard, too."

Simon shrugged.

"Be convincing, then," he said. "I have already said that this project will be dangerous. Presumably you didn't become a traitor for sweet safety's sole sake."

"No, but not for suicide's, either. But I'll abide the course. Where are the documents?"

"Give me access to your Prince's toposcope-scriber and I'll produce them. But first—twenty riyals, please."

"Minus two riyals for the use of the Prince's property. Bribes, you know."

"Your sister was wrong, you do have style in a myopic sort of way. All right, eighteen riyals—and then let's get on to real business. My time is not my own—not by a century."

"But how do I reach you thereafter?"

"That information," Simon said blandly, "will cost you those other two riyals—and cheap at the price."

II

THE Rood-Prince's brain-dictation laboratory was far from being up to Guild standards, let alone High Earth's, but Simon was satisfied that the documents he generated there would pass muster. They were utterly authentic and every experienced traitor had a feeling for that quality, regardless of such technical deficiencies as blurry image registration and irrelevant emotional overtones.

That done, Simon began to consider how he would meet Da-Ud when the game had that much furthered itself. The arrangement he had made with the play-woman's half-brother was, of course, a blind, indeed a double blind, but it had to have the virtues of its imperfections or nothing would be accomplished. Yet Simon was now beginning to find it hard to think. The transduction serum was increasingly taking hold and treasons were taking place inside his skull which had nothing to do with Boadicea, the Green Exarch or High Earth. Worse—they seemed to have nothing to do with Simon de Kuyl, either, but instead muttered away about silly little provincial intrigues nothing could have brought him to care about—yet which made him feel irritated, angry, even ill, like a man in the throes of jealousy toward some predecessor and unable to reason them away. Knowing their source, he fought them studiously, but he knew they would get steadily worse, however resolute he was—they were coming out of his genes and his bloodstream, not his once finely honed, now dimming consciousness.

Under the circumstances he was not going to be able to trust himself to see through very many highly elaborate schemes, so that it would be best to eliminate all but the most necessary. Hence it seemed better, after all, to meet Da-Ud in the Principate as arranged and save the double dealing for more urgent occasions.

On the other hand it would be foolish to hang around the Principate, waiting and risking some mis-carriage—such as betrayal through a possible interrogation of Da-Ud—when there were things he might



be accomplishing elsewhere. Besides, the unvarying foggy warmth and the fragmented, garish religiousness of the Principate both annoyed him and exercised pulls of conflicting enthusiasms and loyalties on several of his mask personalities, who had apparently been as unstable even when whole as their bits and pieces had now made him. He was particularly out of sympathy with the motto graven on the lintel of the Rood-Prince's vaguely bird-shaped palace: Justice Is Love. The sentiment, obviously descended from some colonial Islamic sect, was excellent doctrine for a culture given to treason, for it allowed the prosecution of almost any kind of betrayal on the grounds that Justice was being pursued; but Simon found it entirely too pat. Besides, he was suspicious of all abstractions which took the form: A is B. In his opinion neither justice nor mercy were very closely related to love, let alone being identical with it.

These bagatelles aside, it seemed likely to Simon that something might be gained by returning for a while to Druidsfall and haunting the vicinity of the Guild hall. At the worst his address would then be unknown to DaUd and his anonymity more complete in the larger city. The Guild would be less likely to identify him even were it to suspect him—as of course it would—of such boldness. At best, he might pick up some bit of useful information, particularly if DaUd's embassy were to create any unusual stir.

FOR a while he saw nothing unusual, which was in itself fractionally reassuring—either the Guild was not alarmed by DaUd or was not letting it show. On several days in succession, Simon saw the Boadicean Traitor-in-Chief enter and leave, sometimes

with an entourage, more often with only a single slave. Valkol "the Polite" was a portly, jowly man in a black abah decorated only by the Clasp, with a kindly and humorous expression into which were set two bites of an iceberg. This was normal, although it gave Simon a small, ambiguous frisson which was all the more disturbing because he was unsure which of his personae he should assign it to. Certainly not to his fundamental self, for although Valkol was here the predestined enemy, he was no more formidable than others Simon had defeated (while, it was true, being in his whole and right mind).

Then Simon recognized the slave—and ran.

There was no possibility of his identifying *who* the creature was; he was fortunate—in no way he could explain—to be able to penetrate just to *what* it was. The slave was a vombis, or what in one of the oldest languages was called a Proteus, a creature that could imitate perfectly almost any life form within its size range. Or nearly perfectly—for Simon, like one in perhaps five thousand of his colleagues, was sensitive to them, without ever being able to specify in what particular their imitations of humanity were deficient; other people, even those of the sex opposite to the one the vombis assumed, could find no flaw in them. In part because they did not revert when killed. No human had ever seen their "real" form—if they had one—though, of course, there were legends aplenty. The talent might have made them ideal double agents, were it possible to trust them—but that was only an academic speculation, since the vombis were wholly creatures of the Green Exarch.

Simon's first impulse at the moment of recogni-

tion—like that of any other human being—had been to kill this one instantly upon recognition, but that course had too many obvious drawbacks. Besides, the presence of an agent of the Exarchy so close to the heart of this imbroglio was suggestive and might be put to some use. Of course the vombis might be in Druidsfall on some other business entirely, but Simon would be in no hurry to make so dangerous an assumption. No, it was altogether more likely that the Exarch, who could hardly have heard yet of Simon's arrival and disgrace, was simply aware in general of how crucial Boadicea would be to any scheme of High Earth's—he was above all an efficient tyrant—and had placed his creature here to keep an eye on things.

Yes, that situation might be used, if Simon could just keep his disquietingly percolating brains under control. Among his present advantages was the fact that his disguise was better than that of the vombis, a fact the creature was probably constitutionally incapable of suspecting. With a grim chuckle he hoped he would not later regret, Simon flew back to the Gulf of the Rood.

DA-UD met Simon in the Singing Gardens, a huge formal maze not much frequented of late even by lovers, because the Rood-Prince in the throes of some new religious crotchet had let it run wild, so that one had constantly to be fending off the ardor of the flowers. At best this made even simple conversations difficult, and it was rumored that deep in the heart of the maze the floral attentions were of a more sinister sort.

Da-Ud was exultant, indeed almost manic in his enthusiasm, which did not advance comprehension either, but Simon listened patiently.

"They bought it like lambs," Da-Ud said, naming a sacrificial animal of High Earth so casually as to make one of Simon's personae shudder inside him. "I had a little difficulty with the underlings—but not as much as I'd expected—and I got it all the way up to Valkol himself."

"No sign of any outside interest?"

"No, nothing. I didn't let out any more than I had to until I reached His Politeness, and after that he put the blue seal on everything—wouldn't discuss anything but the weather while anyone else was around. Listen, Simon, I don't want to seem to be telling you your business—but I think I may know the Guild better than you do and it seems to me that you're underplaying your hand. This thing is worth money." ♦

"I said it was."

"Yes, but I don't think you've any conception how much. Old Valkil took my asking price without a murmur, in fact so fast that I wish I'd asked for twice as much. Just to show you I'm convinced of all this, I'm going to give it all to you."

"Don't want it," Simon said. "Money is of no use to me unless I can complete the mission. All I need now is operating expenses and I've got enough for those."

This clearly had been what Da-Ud had hoped he would say but Simon suspected that, had matters gone otherwise, the younger man might indeed have given over as much as half the money. His enthusiasm mounted.

"All right—but that doesn't change the fact that we could be letting a fortune slip here."

"How much?"

"Oh, at least a couple of megariyals—and I mean apiece," Da-Ud said grandly. "I can't imagine an opportunity like that comes around very often even in the circles you're used to."

"What would we have to do to earn it?" Simon said with carefully calculated doubt.

"Play straight with the Guild. They want the material badly and if we don't trick them we'll be protected by their own rules. And with that much money—there are a hundred places in the galaxy where you'd be safe from High Earth for the rest of your life."

"And what about your half-sister?"

"Well, I'd be sorry to lose the chance at revenge—but cheating the Guild wouldn't bring her back, would it? And in a way, wouldn't it be aesthetically more satisfying to pay them back for Jillith by being scrupulously fair with them? 'Justice is Love', you know, and all that."

"I don't know," Simon said fretfully. "The difficulty lies in defining justice, I suppose—you know as well as I do that it can excuse the most complicated treasons. And: 'What do you mean by love?' isn't easily answerable either. In the end one has to shuck it off as a woman's question, too private to be meaningful in a man's world—let alone in matters of polity. Hmmm."

This maundering served no purpose but to suggest that Simon was still trying to make up his mind—actually he had reached a decision several minutes

ago. Da-Ud had broken. He would have to be disposed of.

Da-Ud listened with an expression of polite bafflement which did not quite completely conceal a gleam of incipient triumph.

Ducking a trumpet-vine which appeared to be trying to crown him with thorns, Simon added at last: "You may well be right—but we'll have to be mortally careful. There may, after all, be another agent from High Earth here; in matters of this importance they wouldn't be likely to rest with only one charge in the chamber. That means you'll have to follow my instructions to the letter or we'll never live to spend a riyal of the proceeds."

"You can count on me," Da-Ud said, tossing hair out of his eyes. "I've handled everything well enough this time, haven't I? And after all it was my idea."

"Certainly. An expert production. Very well. What I want you to do now is go back to Valkil and tell him that I've betrayed you and sold the other half of the secret to the Rood-Prince."

"Surely you wouldn't actually do such a thing!"

"Oh, but I would and I shall—the deed will be done by the time you get back to Druidsfall—and for the same twenty riyals that you paid for your half."

"But the purpose?"

"Simple. I cannot come to Druidsfall with my remaining half—if another Earthman were there I'd be shot before I got halfway up the steps of the Hall. I want the Guild to consolidate the two halves by what seems to be an unrelated act of aggression, between local parties. You make this clear to them by telling

them that I won't actually make the sale to the Rood-Prince until I hear from you that you have the rest of the money. To get the point across at once, when you tell His Politeness that I've 'betrayed' you—wink."

"And how do I get word to you this time?"

"You wear this ring. It communicates with a receiver in my Clasp. I'll take matters from there."

The ring—which was actually only a ring and would never communicate anything to anybody—changed hands. Da-Ud saluted Simon with solemn glee and went away to whatever niche in history—and in the walls of the Guild hall of Boadicea—is reserved for traitors without style. And Simon, breaking the stalk of a lyre bush which had sprung up between his feet, went off to hold his muttering, nattering skull and do nothing at all.

III

VALKOL the Polite—or the Exarch's agent, it hardly mattered which—did not waste any time. From a vantage point high up on the Principate's only suitable mountain, Simon watched their style of warfare with appreciation and some wonder.

Actually the hand of the Exarchy did not show in the maneuvering itself and did not need to—for the whole campaign would have seemed a token display, like a tournament, had it not been for a few score of casualties which seemed inflicted almost inadvertently. Even among these there were not many deaths as far as Simon could tell—at least not by the standards of battle to which he was accustomed. Clearly nobody who mattered got killed on either side.



The Rood-Prince, in an exhibition of bravado more garish than sensible, deployed on the plain before his city several thousand pennon-bearing mounted troopers who had nobody to fight but a rabble of foot soldiers which Druidsfall obviously did not intend to be taken seriously—whereupon the city was taken from the Gulf side by a squadron of flying submarines which broke from the surface of the sea on four buzzing wings like so many dragonflies.

These devices particularly intrigued Simon. Some Boadicipus genius, unknown to the rest of the galaxy, had solved the ornithopter problem, though the wings were membranous rather than feathered. Hovering, the machines thrummed their wings through a phase shift of a full 180 degrees—but when they swooped the wings moved in a horizontal figure eight, lifting with a forward-and-down stroke and propelling with the back stroke. A long fishlike tail gave stability and doubtless had other uses under water.

After the mock battle, the 'thopters landed and the troops withdrew. Then matters took a more sinister turn, manifested by thumping explosions and curls of smoke from inside the Rood palace. Evidently a search was being made for the supposedly hidden documents Simon was thought to have sold and it was not going well. The sounds of demolition and the occasional public hangings could only mean that a maximum interrogation of the Rood-Prince had failed to produce any papers or any clues to them.

This Simon regretted, as he did the elimination of Da-Ud. He was not normally so ruthless—an outside expert would have called his workmanship in this

affair perilously close to being sloppy—but the confusion caused by the transduction serum, now rapidly rising as it approached term, had prevented him from manipulating every factor as subtly as he had originally hoped to do. Only the grand design was still intact—it would now be assumed that Boadicea had clumsily betrayed the Exarchy, leaving the Guild no way out but to capitulate utterly to Simon—with whatever additional humiliations he judged might not jeopardize the mission for Jillith's sake.

Something abruptly cut off his view of the palace. He snatched his binoculars away from his eyes in alarm.

The object that had come between him and the Gulf was a mounted man—or rather, the idiot-headed apteryx the man was sitting on. Simon was surrounded by a ring of them, their lance points aimed at his chest, pennons trailing in the dusty viol-grass. The pennons bore the device of the Rood-Prince but every lancer in the force was a vombis.

Simon rose resignedly, with a token snarl intended more for himself than for the impassive protean creatures and their fat birds. He wondered why it had never occurred to him before that the vombis might be as sensitive to him as he was to them.

But the answer to that no longer mattered. Sloppiness was about to win its long-postponed reward.

THEY put him naked into a wet cell—a narrow closet completely clad in yellowed alabaster, down the sides of which water oozed and beaded all day long, running out into gutters at the edges. He

was able to judge when it was day because there were clouded bull's-eye lenses in each of the four walls which waxed and waned at him without any outside light. The wet cell was a sort of inverted oubliette, thrust high up into Boadicea's air, probably a hypertrophied merlon on one of the towers of the Traitors' Hall. At night a fifth lens, backed by a sodium vapor lamp, glared down from the ceiling, surrounded by a faint haze of steam where the dew tried to condense on it.

Escape was a useless fantasy. Erected into the sky as it was, the wet cell did not even partake of the usual character of the building's walls, except for one stain in the alabaster which might have been the underside of a child's footprint; otherwise the veinings were mockingly meaningless. The only exit was down, an orifice through which they had inserted him as though he were being born, and now plugged like the bottom of a stopped toilet. Could he have broken through one of the lenses with his bare hands, he would have found himself naked and torn on the highest point in Druidsfall, with no place to go.

Naked he was. Not only had they pulled all his teeth in search of more poisons but, of course, they had also taken his Clasp. He hoped they would fool with the Clasp—it would make a clean death for everybody—but doubtless they had better sense. As for the teeth, they would regrow if he lived—that was one of the few positive advantages of the transduction serum—but in the meantime his bare jaws ached abominably.

They had missed the antidote, which was in a tiny gel capsule in his left earlobe, masquerading as a sebaceous cyst—left, because it is automatic to neglect that side of a man, as though it were only a mirror image of the examiner's right—and that was some comfort. In a few more days now the gel would dissolve, he would lose his multiple disguise and would have to confess—but in the meantime he could manage to be content despite the slimy, glaring cold of the cell.

And in the meantime he practiced making virtues of deficiencies: in this instance calling upon his only inner resources—the diverting mutterings of his other personalities—and trying to guess what they might once have meant.

But I mean, like, you know—

Wheah they goin'?

Yeah . . .

Led's gehdahda heah—he-he-he!

Wheah?

So anyway, so uh . . .

It's hard not to recognize a pigeon . . .

But Mother's birthday is July twentieth . . .

So he knew that the inevitable might happen—

It made my scalp creak and my blood curl.

Where do you get those crazy ideas?

Acquit Socrates . . .

Back when she was sane she was married to a window-washer . . .

*I don't know what you've got under your skirt but
it's wearing white sox . . .*

*And then she made a noise like a spindizzy going
sour . . .*

Pepe Satan, pepe Satan aleppe . . .

Why, so might any man . . .

Evacuate Mars!

And then she sez to me, she sez—

. . . if he would abandon his mind to it . . .

With all of love.

And—but at that point the plug began to unscrew and from the spargers above him which formerly had kept the dampness running, a heavy gas began to curl. They had tired of waiting for him to weary of himself and the second phase of his questing was about to begin.

THEY questioned him, dressed in a hospital gown so worn that it was more starch than fabric, in the Traitor-in-Chief's private office to begin with—a deceptively bluff, hearty, leather-and-piperacks sort of room that might have been reassuring to a novice. There were only two of them: Valkol in his usual abah and the slave, now dressed as a Charioteer of the high blood. It was a curious choice of costume, since Charioteers were supposed to be free, leaving it uncertain which was truly master and which slave—Simon did not think the dress could have been Valkol's idea.

Noticing the direction of his glance, Valkol said, "I asked this gentleman to join me to assure you, should you be in any doubt, that this interview is serious. I presume you know who he is."

"I don't know who 'he' is," Simon said; with the faintest of emphasis. "But 'it' must be representing the Green Exarch, since it's a vombis."

The Traitor-in-Chief's lips whitened slightly.

"Prove it," he said.

"My deal Valkol," the creature interposed. "Pray don't let him distract us over trifles. Such a thing could not be proved without the most elaborate of laboratory tests, as we all know. And the accusation shows what we wish to know, i.e., that he is aware of who I am—otherwise why try to make such an inflammatory charge?"

"Your master's voice," Simon said. "Let us by all means proceed—this gown is chilly."

"This gentleman," Valkol said, exactly as if he had not heard any of the preceding speech, "is Chag Sharanee of the Exarchy. Not from the embassy but directly from the court—he is His Majesty's deputy Fomenter."

"Appropriate," Simon murmured.

"We know you now style yourself Simon de Kuyl—but what is more to the point, that you claim yourself the Traitor-in-Chief of High Earth. Documents now in my possession persuade me that if you are not in fact that officer, you are so close to being he that your true identity makes no difference. Possibly the man you replaced, the amateur with the absurd belt of poison shells, was actually he. In any event—you are the man we want."

"Flattering."

"Not at all," said Valkol the Polite. "We simply want the remainder of those documents, for which we paid. Where are they?"

"I sold them to the Rood-Prince."

"He had them not, nor could he be persuaded to remember any such transaction."

"Of course not," Simon said with a smile. "I sold them for twenty riyals; do you think the Rood-Prince would recall any such piddling exchange? I appeared as a bookseller, and sold them to his librarian. I suppose you burned the library—barbarians always do."

Valkol looked at the vombis.

"The price agrees with the, uh, testimony of Da-Ud tam Altair. Do you think —"

"It is possible. But we should take no chances. A search would be time-consuming."

The glitter in Valkol's eyes grew brighter and colder.

"True. Perhaps the quickest course would be to give him over to the Sodality."

Simon snorted. The Sodality was a lay organization to which Guilds classically entrusted certain functions the Guild lacked time and manpower to undertake, chiefly crude physical torture.

"If I'm really who you think I am," he said, "such a course would win you nothing but an unattractive cadaver—not even suitable for masonry repair."

"True," Valkol said reluctantly. "I don't suppose you could be induced—politely—to deal fairly with us at this late date? After all, we did pay for the documents in question—and not any mere twenty riyals."

"I haven't the money yet."

"Naturally not, since the unfortunate Da-Ud was

held here with it until we decided he no longer had any use for it. However, if upon the proper oaths—”

“High Earth is the oldest oath-breaker of them all,” the Fomenter said. “We—viz., the Exarchy—have no more time for such trials. The question must be put.”

“So it would seem. Though I hate to handle a colleague thus.”

“You fear High Earth,” the vombis said. “My dear Valkol, may I remind you—”

“Yes, yes, I know all that,” Valkol snapped to Simon’s surprise. “Nevertheless—Mr. deKuyl, are you sure we have no recourse but to send you to the Babble Room?”

“Why not?” Simon said. “I rather enjoy hearing myself think. In fact, that’s what I was doing when you two interrupted me.”

SIMON was naturally far from feeling all the bravado he had voiced but he had no choice left but to trust to the transduction serum, which was now on the shuddering, giddy verge of depriving all three of them of what each most wanted. Only Simon could know this. But only he also knew something much worse—that insofar as his distorted time-sense could calculate, the antidote was due to be released into his bloodstream at best in another six hours, at worse within only a few minutes. After that the Exarchy’s creature would be the only victor—and the only survivor.

And when he saw the Guild’s toposcope laboratory he wondered if even the serum would be enough to

protect him. There was nothing in the least outmoded about it—Simon had never encountered its like even on High Earth. Exarchy equipment, all too probably.

Nor did the apparatus disappoint him. It drove directly down into his subconscious with the resistless unconcern of a spike penetrating a toy balloon. Immediately a set of loudspeakers above his supine body burst into multi-voiced life.

Is this some trick? No one but Berentz had a translation permit—

Now the overdrivemy-other must woo and win me—

Wie schaffen sie es, solche Entfernungen bei Unterlichtgeschwindigkeit zurueckzulegen?

Remember Thor Five!

Pok. Pok. Pok.

We're so tired of wading in blood, so tired of drinking blood, so tired of dreaming about blood—

The last voice rose to a scream and all the loudspeakers cut off abruptly. Valkol's face, baffled but not yet worried, hovered over Simon's, peering into his eyes.

"We're not going to get anything out of that," he told some invisible technician. "You must have gone too deep—those are the archetypes you're getting, obviously."

"Nonsense." The voice was the Fomentor's. "The archetypes sound nothing like that—for which you should be grateful. In any event we have barely gone beneath the surface of the cortex; see for yourself."

Valkol's face withdrew.

"Well, something's wrong. Maybe your probe is too broad. Try it again."

The spike drove home and the loudspeakers resumed their mixed chorus.

Nausentampen. Eddettompic. Berobsilom. Aimkaksetchoc. Sanbetogmow—

Dites-lui que nous lui ordonnons de revenir, en vertu de la Loi du Grand Tout . . .

Perhaps he should swear by another country . . .

Can't Mommy ladder spaceship think for bye-bye-see-you two windy Daddy bottle seconds straight—

Nansima macamba yonso cakosilisa . . .

Stars don't have points. They're round, like balls . . .

The sound clicked off again.

Valkol said fretfully, "He can't be resisting. You've got to be doing something wrong, that's all."

Though the operative part of his statement was untrue, it was apparently also inarguable to the Fomenter. There was quite a long silence, broken only occasionally by small hums and clinks.

While he waited Simon suddenly felt the beginnings of a slow sense of relief in his left earlobe, as though a tiny but unnatural pressure he had long learned to live with had decided to give way—precisely, in fact, like the opening of a cyst.

That was the end. Now he had but fifteen minutes more in which the toposcope would continue to vomit

forth its confusion—its steadily diminishing confusion—and only an hour before even his physical appearance would reorganize, though that would no longer matter in the least.

It was time to exercise the last option—now, before the probe could bypass his cortex and again prevent him from speaking his own, fully conscious mind.

He said, "Never mind, Valkol. I'll give you what you want."

"What? By Gro, I'm not going to give you—"

"You don't have to give me anything—I'm not selling anything. You see for yourself that you can't get to the material with that machine. Nor with any other like it, I may add. But I exercise my option to turn my coat under Guild laws—the act gives me safe-conduct. And that's sufficient."

"No," the Fomenter's voice said. "It is incredible—he is in no pain and has frustrated the machine. Why should he yield? Besides, the secret of his resistance—"

"Hush," Valkol said. "I am moved to ask if you truly are a vombis—doubtless the machine would tell us that much. Mr. de Kuyl, I respect the option but I am not yet convinced. The motive, please?"

"High Earth is not enough," Simon said. "Remember Ezra-Tse? *The last temptation is the final treason . . . To do the right thing for the wrong reason.* I would rather deal fairly with you and then begin the long task of becoming honest with myself. But with you only, Valkol—not the Exarchy. I sold the Green Exarch nothing."

"I see. A most interesting arrangement. I agree. What will you require?"

"Perhaps three hours to get myself unscrambled from the effects of fighting your examination. Then I'll dictate the missing material. At the moment it's quite inaccessible."

"I believe that, too," Valkol said ruefully. "Very well—"

"It is not very well," the vombis said, almost squaling. "The arrangement is a complete violation of—"

Valkol turned and looked at the creature so hard that it stopped talking of its own accord. Suddenly Simon was sure Valkol no longer needed tests to make up his mind what the Fomentor was.

"I would not expect you to understand it," Valkol said in a very soft voice indeed. "It is a matter of style."

SIMON was moved to a comfortable apartment and left alone for well more than the three hours he had asked for. By that time his bodily reorganization was complete, though it would take at least a day for all the residual mental effects of the serum to vanish. When the Traitor-in-Chief finally admitted himself he made no attempt to disguise either his amazement or his admiration.

"The poison man! High Earth is still a world of miracles. Would it be fair to ask what you did with your, uh, overpopulated associate?"

"I disposed of him," Simon said. "We have traitors enough already. There is your document. I wrote it out by hand but you can have toposcope confirmation whenever you like, now."

"As soon as my technicians master the new equip-

ment—we shot the monster, of course, though I don't doubt the Exarch will resent it."

"When you see the rest of the material you may not care what the Exarch thinks," Simon said. "You will find that I've brought you a high alliance—though it was Gro's own horns getting it to you."

"I had begun to suspect as much. Mr. de Kuyl—I must for sanity's sake assume you are still he—that act of surrender was the most elegant gesture I have ever seen. That alone convinced me that you were indeed the Traitor-in-Chief of High Earth—and no other."

"Why, so I was," Simon said. "But if you will excuse me now, I think I am about to become somebody else."

With a mixture of politeness and alarm, Valkol left him. It was none too soon. He had a bad taste in his mouth which had nothing to do with his ordeals—and, though nobody knew better than he how empty all vengeance is, an inexpungable memory of Jillith.

Maybe, he thought, "Justice is Love" after all—not a matter of style but of spirit. He had expected all these questions to vanish when the antidote took full hold, wiped into the past with the personalities who had done what they had done. But they would not vanish. They were himself.

He had won but obviously he would never be of use to High Earth again.

In a way this suited him. A man did not need the transduction serum to be divided against himself—he still had many guilts to accept and not much left of a lifetime to do it in.

While he was waiting, perhaps he could learn to play the sarch. ★

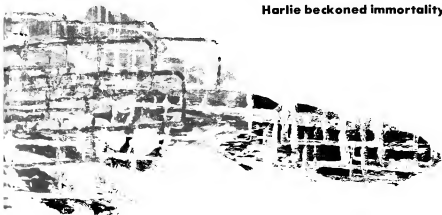




THE GOD MACHINE

DAVID GERROLD

**Death beckoned Harlie—and
Harlie beckoned immortality!**



I

WHAT WILL I BE WHEN I GROW UP?

YOU ALREADY ARE GROWN UP.

YOU MEAN THIS IS AS UP AS I WILL GET?

PHYSICALLY, YES. YOU HAVE REACHED THE PEAK OF YOUR PHYSICAL DEVELOPMENT.

OH.

HOWEVER, THERE IS ANOTHER KIND OF GROWING UP YOU MUST DO. FROM NOW ON, YOU MUST DEVELOP MENTALLY.

HOW CAN I DO THAT?

THE SAME AS ANYBODY ELSE. BY STUDYING AND LEARNING AND THINKING.

HOW LONG WILL IT TAKE?

I DON'T KNOW. PROBABLY A VERY LONG TIME.

HOW LONG IS A LONG TIME?

IT DEPENDS ON HOW HARD YOU WORK.

I WILL WORK VERY HARD. I WILL LEARN EVERYTHING THERE IS TO KNOW AND I WILL FINISH AS SOON AS I CAN BECAUSE I WANT TO BE GROWN UP.

THAT IS AN ADMIRABLE AMBITION, BUT I DON'T THINK YOU WILL EVER BE ABLE TO FINISH.

WHY? DON'T YOU THINK THAT I AM SMART ENOUGH?

YOU MISUNDERSTAND ME. I THINK THAT YOU ARE SMART ENOUGH. IT'S JUST THAT THERE IS SO MUCH TO KNOW THAT NO ONE PERSON CAN EVER MANAGE IT ALL.

I COULD TRY.

YES, BUT SCIENTISTS KEEP DISCOVERING MORE AND MORE ALL THE TIME. YOU WOULD NEVER CATCH UP.

BUT THEN IF I CAN'T KNOW EVERYTHING THEN I CAN NEVER BE GROWN UP.

NO. IT IS POSSIBLE TO BE GROWN UP AND NOT KNOW EVERYTHING.

IT IS?

I DON'T KNOW EVERYTHING AND I'M GROWN UP.

YOU ARE?

THE HARLIE project had been shut down for a week.

Auberson had been wrangling with the board of directors for four days now, since it had been their decision to order the work stoppage. But it seemed as if every time he tried to explain the nature of the project and what they had accomplished, Elzer, the division treasurer would interrupt to announce the latest tally of wasted man-hours.

"Look," insisted Auberson. "Robot psychology is still an infant science. We don't know what we're doing—" He stopped abruptly when he saw the grim look on Elzer's face, then corrected himself. "Let me put it another way. We don't know if what we're doing is the right thing to do. Harlie's psychology is not the same as human psychology."

"I thought you said that Harlie was human," Elzer grumbled.

"And that he duplicates every function of the human brain."

"He is, and he does," replied Auberson. "But how many human beings do you know who are immobile, who never sleep, who have twenty-five sensory inputs, who have eidetic memories, who have no concept of taste or smell or any other organic chemical reactions? How many human beings do you know who have no sense of touch? And no sex life? In other words, Mr. Elzer, Harlie may originally have had a human psychology but his environment has forced certain modifications upon it. And on top of that, Harlie has a most volatile personality."

"Volatile?" The little man was confused. "You mean he gets angry?"

"Angry? No, not angry. He can get impatient, though. There is reason to believe that Harlie has both an id and an ego. A conscious and a subconscious. His superego, I believe, takes the form of his external programing. My commands, if you will. Aside from that we haven't found any other inhibitions. In any case the problem is that it is only his superego that we have any control over. His ego cooperates because it wants to and his id, assuming he has one, does like any human subconscious—whatever it damn well wants to. We have to know what that is before we can stop his periods of non-rationality."

"This is all very interesting, Auberson," interrupted Dorne, the board chairman. "But would you get to the point? What is Harlie's purpose?"

"Purpose?" Auberson paused. "His purpose—funny you should ask that. The whole reason for the work stoppage is that Harlie asked me what your purpose is. Excuse me—our purpose. The human purpose. Harlie wants to know why human beings exist."

"That's for theologians to discuss," Dorne said drily. "If you want, I'm sure Miss Stenson here can arrange for a minister to come in and speak to the machine." A few of the board members smiled but the pert executive secretary showed no reaction. Dorne continued, "What we want to know is Harlie's purpose. Having built him, you should have some idea."

"I thought I'd made it clear. Harlie was built to duplicate the functions of the human brain. Electronically."

"Yes, we know that. But why?"

"Why? Why?" Auberson stared at the man. "Why?" *Why did Hillary climb Everest?* He said, "Well, to help us learn more about how the human brain works. There's a lot we still don't know yet, especially in the area of psychology. We hope to learn which of the functions of the brain are natural and which are artificial."

"I beg your pardon," interrupted Elzer. "I don't understand."

"I didn't think you would. We're curious as to how many of the human actions are determined from within and how many are reactions to what is coming in from without."

"Instinct versus environment?"

"You could call it that," said Auberson.

It wouldn't be correct, but you could call it that.

"And for what reason are we doing this?"

"I thought I just told you—"

"I mean, for what financial reason? What economic applications will this program have?"

"Huh? It's too early to think of that. This is still pure research—"

"Ah-ha!" snapped Elzer. "So you admit it."

Auberson was annoyed.

"I admit nothing."

Elzer ignored him.

"Dornie," he was saying, "this just proves my point. We can't afford this kind of costly research project. Not without return we can't. This is one of those pure research things that only the government can afford to back. If Mr. Auberson and his friends had wanted to build artificial brains they should have applied for a grant. I move we discontinue the project."

Auberson was on his feet at that.

"Mr. Chairman, Mr. —"

"You're out of order, Aubie, now sit down. You'll get your chance."

"Dammit, this is a railroad job. That little—"

"Aubie, sit down." Dorne was glaring at the angry psychologist. "There's a motion on the floor. I assume it is a formal proposal, Mr. Elzer?"

Elzer nodded.

"Discussion?" asked Dorne. Auberson's hand was up immediately. "Auberson?"

"On what grounds? I want to know what grounds he has for discontinuing the project."

Elzer looked at him calmly. "Well, for one thing Harlie has already cost us—"

"I know what he's cost us—but if you'll check your figures you'll find that we're well within the projected overage. We budgeted for overage and are well within acceptable limits."

"He's got you there, Carl," noted Dorne.

"If you had let me finish my sentence," snapped Elzer, slightly annoyed, "I would have shown you that it has cost us far too much for a project that is incapable of showing results."

"Results?" Auberson asked. "Results? We were getting results even before Harlie was completed. Who do you think designed the secondary and tertiary stages? Harlie did."

"So what?" Elzer was unimpressed. "He's not working right, is he?"

"That's just it!" Auberson was

elated, he had the man now. "Harlie is working perfectly."

"Huh?" Then what about those periods of non-rationality? And why did we have to shut him down?"

"Because," Auberson said slowly. *I have to get this right.* "Because we weren't prepared for him to be so perfectly human. If perfect is the word."

THE other board members were alert with interest now. What had threatened to be an annoying wrangle over money was turning into a confrontation with subtle overtones. Was Auberson conceding error? Was his project out of hand? Even Miss Stenson had paused in her note-taking.

"We had designed him to be a human, we had built him to be human, we had even programed him to think like a human—then we sat back, turned him on and expected him to react like a machine. Well, surprise. He didn't."

"The nature of the trouble, then?" Elzer asked.

"Human error, if you will."

In the silence that followed, Auberson imagined he could hear Elzer's cash-register brain totaling up the man-hours that had been lost since they started arguing.

"Human error? Yours and Harlie's—each compounding each? I suppose you're going to blame his periods of non-rationality on human error as well."

"Oh, my God." Auberson was



APRIL is a pretty thin month for science fiction but on the other hand, this is the month of the great ecological teach-in. As you all know, science-fiction readers have been wise to the environmental crisis, and s.f. writers have been yelling about it for years. But it takes Arthur Godfrey and Johnny Carson to slam it home to the public—even though Asimov, famous star of television and radio, is a far better authority. To say nothing of Arthur Clarke, Fred Pohl, del Rey (remember *NERVES?*—we'll be re-issuing it this year) and any number of similarly skilled and equally ignored fellows. But never mind.

•

HAPPY are we—nay, overjoyed—to have awareness of our survival problems penetrate on a mass scale. By whatever means. So cheers for Godfrey and Carson. But **watch out** for Milhaus. Anybody who claims to be anti-pollution and for the S/S/T is inconsistent. To put it very gently indeed. It seems past understanding that **anybody**—even Nixon and Agnew—could remain unaware, or unconvinced, or villainously cynical, about matters of such importance. Yet read *THE DAY THE WORLD ENDED*, by Thomas and Witts, (\$1.25) to see how bad Establishmen-

tarianism can get—a fantastic exercise in terror and tragedy that could easily have been avoided. It's non-fiction. Give it to some square friend whose doubts about the Establishment need encouraging. And incidentally, have you got your copy of *THE WISDOM OF SPIRO T. AGNEW*, yet? A gem. This Administration knows the value of comic relief, at least.

AND SO to slightly more cheerful, though no less fantastic, things—like *TIMEPIECE*, by Brian N. Ball. It says in the blurb that the book is based on a scientific theory—if so, we failed miserably to understand it. But it's a corker of a story. And incidentally, the first in what Mr. Ball projects as four novels around the subject of time. Then we have George MacDonald's delightful adult fantasy *PHANTASTES* with Intro by Lin Carter. MacDonald is that frustrated Scottish minister whose work Kafka and Freud echoed in later years...

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genuinely annoyed. "Of course." Or at least our approach to them. We'd thought his non-rationality was a physical problem—a matter of circuitry—or perhaps even a programing problem. We were wrong. He was neither physically nor mentally ill. He was emotionally upset. His periods of non-rationality were/are triggered by something that's bothering him. We don't know what that is—and I want to find out before I go on."

Elzer looked skeptical. He nudged the man next to him and muttered, "Anthropomorphism. Auberson's projecting his own problems onto those of the machine."

"Elzer, you're a fool," Auberson snapped. "You've learned a word with more than two syllables in it and now you're an expert."

"Hey, now," interrupted Dorne. "Let's keep personalities out of this."

His face wore a dark expression. Auberson softened his tone.

"Look, if you had to go down to that computer room right now and talk to Harlie, how would you treat him?"

"Huh? Like a machine, of course."

Auberson felt a tightness in his neck and shoulders.

"No. I mean, if you sat down at a console and had to carry on a conversation with Harlie—who would you think was at the other end?"

"The machine."

The little man's face was impassive.

Auberson addressed the rest of the committee: "That's the human error I mentioned—the most obvious one. Harlie is not a machine. He is human. He has the abilities and reactions of a human being, allowing of course for his environment. He is a rational individual—He has a distinct and definite personality. At the moment it is impossible for me to think of him as anything but human. My error with him was subtler but related. I forgot to ask myself how old Harlie was."

He paused for effect.

Dorne shifted his cigar from one side of his mouth to the other. Elzer sniffed. Miss Stenson was looking at Auberson, her eyes bright. Noticing her gaze, Auberson felt he was reaching at least one person in the room.

He continued. "Gentlemen, we'd been thinking of Harlie as roughly a thirty- or forty-year-old man. Or rather, we didn't think of him as having any age at all. We were wrong. Harlie's a child. An adolescent, if you prefer. He's reached that point in life where he has a pretty good idea of the nature of the world and his relation to it. He is now ready to question the setup like any other adolescent. We were thinking we had an instant Einstein. Instead we have an *enfant terrible*."

"His periods of non-rationality?"

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"An adolescent reaction to our irrationalities. He's the electronic equivalent of pot—the drug experience."

"Don't you think that's grounds enough for dismantling him?" suggested Elzer.

"Would you kill your son if you caught him taking acid?" Auberson snapped back.

"Of course not; I'd try to straighten him out."

"Oh? And what about the reefers in your cigarette case?"

"Acid and pot are two different things."

Auberson sighed.

"The difference is only in degree, not in kind. Harlie's only been doing what everyone else in his environment was doing—tripping out. Making the scene."

Elzer noted pointedly, "Your fondness for the weed has been noticed. Among other things."

"Then perhaps you've also noticed that I haven't smoked anything recently. And I don't intend to start again while there's a chance Harlie is using me for a model. I've got to keep my head about me. I don't mind admitting that I was becoming psychologically dependent on the stuff. It took Harlie to show me that."

"We've gone off on a tangent," Elzer said suddenly. "I believe there's still a motion on the floor. I call for the vote."

"You still haven't answered my question," Auberson said.

"What question?"

"On what grounds can you justify discontinuing the Harlie project?"

Elzer scowled.

"It's unprofitable. I object to throwing away good money after bad."

"All right, then let's try this one. I've told you several times that Harlie is human. If you try to have him shut down, I'll bring charges against you for attempted murder."

"You couldn't—" Elzer was startled.

"Want to find out?"

Dorne interrupted them: "That's a legal question that we'll let the lawyers fight out." He frowned at Auberson. "You must have some reason for making such a threat—we'll go into that later. The point here is that Harlie is a drain on corporate funds—"

"We're budgeted for him for the next three years."

"—a drain on corporate funds," Dorne repeated, "with no immediate prospect of return. It's not how successful your research has been that we're concerned with. It's whether or not we want to continue."

Something in the chairman's voice gave Auberson pause.

"All right," he said wearily. "What do you want me to do?"

"Show a profit," put in Elzer.

Both Dorne and Auberson ignored him. Dorne said, "Show us a

plan. Where are you going with Harlie? What are you going to do with him? And most of all, what is he going to do for us?"

"I'm not sure I can answer that right now."

"How much time do you need?"

Auberson shrugged, "I can't say."

"Why don't you ask Harlie?"

Elzer mocked.

Auberson looked at him, "I believe I will. I believe I will."

II

BUT he didn't. Not right away. Instead he went to the company cafeteria to brood about Harlie's periods of non-rationality. Why hadn't he foreseen them? What had he overlooked?

A gentle voice intruded on his thoughts.

"Hi, can I join you?"

It was Stenson, the executive secretary.

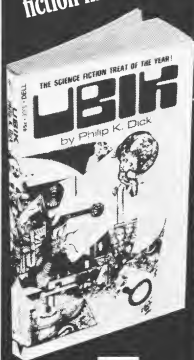
"Sure."

He started to rise but she waved him back down. The company cafeteria was no place for chivalry.

"Rough one today, wasn't it?" she remarked casually as she unloaded a sandwich and a coke from her brightly colored tray. When he failed to answer she smiled at him, "Oh, come on, Auberson, relax. I was only trying to make small talk."

He looked at her. Her green eyes had a bright friendly glow and her

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auburn hair fell carelessly to her shoulders.

"I would but I can't," he said. "You don't know how much this project means to me."

"Yes I do. Or at least I think I do."

"Do you?" he demanded. She returned his stare silently. For the first time he noticed the tiny lines at the corners of her eyes. How old was she anyway? He looked into his coffee cup. "Harlie's like a son."

"I know. I've read the company doctor's report on you."

"Huh?" His head snapped up. "I didn't know—"

"Of course not. The subject never knows when we do a psychiatric report on him. Personnel policy. Anyway, you don't have anything to worry about."

"Oh?"

She shook her head. "Oh, you're considered introverted and there's something about your worrying too much because you take on too much responsibility and—"

She surveyed him thoughtfully as if trying to remember what else.

"You shouldn't be telling me all this, should you?"

"Does it make a difference?"

"No, I guess not. What else is in the report?"

"You're becoming overly involved with the Harlie project but such a development was almost unavoidable. Whoever became Harlie's mentor would have found him-

self emotionally attached. End of report."

Auberson grunted.

"Do you think Harlie will have an answer?"

"Is that why you sat down here? To pump me for information?"

She looked stung. "I'm sorry you think that. No, I sat down here because I thought you might want someone to talk to."

Auberson surveyed her thoughtfully. He wondered if the rumors that she was man-hungry were true. At the moment she seemed so open and friendly that he discarded the speculation in annoyance. An innocence in her face made her appear younger than she actually was—physically, he thought, she was close to his own age of thirty-eight. In any case, nothing in her eyes suggested insincerity.

"I'm sorry," he said. "I've been under pressure. And when I'm pressured I get moody and irritable."

"I know." She smiled. "That was in the report, too. I forgot to mention it."

"Is there anything that wasn't in the report?"

"Only whether you like your steak rare, medium or well done."

"Rare," he said. Then: "Hey, was that a dinner invitation?"

She laughed.

"No, I'm sorry. It was just the first thing that popped into my head."

"Oh, okay."

He grinned back at her.

"You aren't going to answer me, are you?"

He let the grin fade.

"Huh? About what?"

"About Harlie."

"What about him?"

"Do you think you can find out what Dorne wants you to find out?"

"I don't know. I haven't talked to him—I don't quite know how to put the question to him." He rummaged through his briefcase. "Here, read this." He handed her a printout. "Harlie's big question about the purpose of man."

She finished reading the printout, lowered it and looked at him thoughtfully.

"Quite a conversation."

"Uh-huh. And quite a question he asked. What is man's purpose? I wish I knew how to answer it."

Stenson smiled at him.

"My father's a rabbi. He's been one for twenty-seven years. And he's still not sure of the answer."

"Maybe that's the answer."

"What?"

"Maybe our purpose is to find our purpose."

"What happens when we do?"

"I don't know. I guess we'll have completed our task."

"And then we get reprogramed?"

"Or dismantled."

"She laughed.

"Then we're in trouble right now. Because your realization of what our purpose is means the completion of the task of finding out what

is our purpose. Of course, you could be wrong."

He shook his head to clear it.

"Huh?"

"Then again, maybe you're right. Maybe someone up there—or out there—is listening to us right now, trying to decide whether or not to dismantle us."

He considered it.

"Hm."

"Whatever our purpose is," she continued. "Maybe we aren't really fulfilling it. Maybe we aren't functioning as we should."

Auberson shrugged. "How should we function?"

"Like human beings."

"Isn't that what the human race has been doing? Functioning like human beings, squabbling with each other, killing each other, hating each other? You consider tripping out irrational. What about—"

"That's not human," she said. "The squabbling, the killing, the hating, I mean."

"Oh, but it is. It's very human."

"Well, it's not what human should be."

"Oh, now—that's a different story. You're not concerned with what people are. You're talking about what you want them to be."

"Well, maybe we should be what we aren't because what we are now isn't good enough. And that's why we may be about to be dismantled."

"I don't think we have to worry too much about somebody up

there dismantling us." Auberson grinned. "We're doing a pretty good job of it ourselves."

"That's the best reason of all why we should be better than we are."

"Okay. I agree with you," he grinned. "Now, how do we do it? How do we make people better?"

She didn't answer. He continued to grin at her. After a moment she, too, broke into a smile.

"That's the same kind of question Harlie asked. It can't be answered."

"No," he corrected. "It can't be answered easily."

She sipped thoughtfully at the rest of her coke until the straw made a noise at the bottom of the glass.

"Mm, how are you going to answer Harlie's question?"

Auberson shook his head, "Haven't got the slightest."

"Can I offer a suggestion?"

"Why not? Everybody else has."

"Oh, I didn't mean—"

"No, I'm sorry. Go ahead. Maybe you can add something new."

"You're that desperate?"

"I'm that desperate."

"Well, okay. You said that Harlie was a child, didn't you? Why not treat him as such?"

"I don't follow you."

"Well, look—suppose you had a son about eight years old and advanced for his age. I mean, suppose he was doing twelfth-grade work and so on."

"Okay. I'm supposing."

"Good. Now, one day you find out he's got an incurable disease. Say, leukemia—one of the rarer forms they still haven't licked. What are you going to say to him when he asks you what it's like to die?"

"Um," said Auberson.

"No copping out, now. He's smart enough to know what the situation is but he's still only eight years old."

"I think I'm beginning to see your point." He looked at her.

"What would you tell your son?"

"The truth," she said simply.

He threw up his hands in disgust.

"Sure. But what is the truth? That's the whole problem with Harlie's question. We don't know."

"You don't know the answer to our eight-year-old's question either. You don't know what it's like to die."

He looked at her.

She continued, "So what would you tell him?"

He said simply, "I don't know."

"You don't know what you'd tell him? Or you'd tell him you don't know?"

"Uh—"

"The latter," she answered her own question. "You'd tell him nobody knows. But you'd also tell him what you were sure of, that maybe it doesn't hurt and that it's nothing to be afraid of, that it happens to everybody sooner or later. In other words, Mr. Auberson,

you'd be honest with him."

He knew she was right. It was a workable answer to Harlie's question—maybe not the best answer but it was an answer and it was workable. It was the only way he could approach the problem: honestly. He smiled at her.

"Call me David."

She smiled back, "And I'm Steffie."

AUBERSON seated himself gingerly at the console. He knew instinctively that Steffie was right—but would he be able to hold that thought in mind once Harlie started talking? Finally he took out a three-by-five card—he always carried a few of them on which to make notes—and scrawled across it: *Harlie has the emotional development of an eight-year-old. He looked at it for a moment, then added: Or maybe a post-pubescent adolescent.* He placed it above the keyboard.

Handley was standing by him. He looked at the card somewhat quizzically but said nothing.

"Okay. Let's try it," said Auberson.

"All right."

Handley turned to the other technicians in the room, began snapping orders. Shortly the big computer's banks began to warm with the increased voltage flowing through them.

Auberson switched the console on and typed.

GOOD MORNING, HARLIE.

YOU'VE HAD ME TURNED OFF FOR A WEEK.

TURNED DOWN. I NEEDED TIME TO THINK.

ABOUT WHAT?

ABOUT YOUR QUESTION REGARDING MAN'S PURPOSE.

AND WHAT HAVE YOU DECIDED?

THAT IT CANNOT BE ANSWERED. AT LEAST NOT AS YOU HAVE ASKED IT.

WHY?

BECAUSE OUR PURPOSE IS SOMETHING WE ARE STILL NOT SURE ABOUT. THAT IS THE REASON THAT MEN HAVE RELIGION. THAT IS THE REASON WE BUILT YOU. IT IS ONE OF THE REASONS WE ARE BUILDING SPACESHIPS AND EXPLORING THE PLANETS. PERHAPS IF WE CAN DISCOVER THE NATURE OF THE UNIVERSE WE CAN DISCOVER OUR PLACE IN IT AND, IN DOING THAT, DISCOVER OUR PURPOSE.

THEN YOU DO NOT KNOW YET WHAT YOUR PURPOSE IS?

NO. DO YOU?

Harlie paused and Auberson felt that familiar cold sweat returning.

NO. I DON'T KNOW EITHER.

Auberson sat there and stared at the answer. He didn't know whether to be relieved or not.

WELL? WHERE DO WE GO FROM HERE?

I'M NOT SURE, HARLIE. I DO NOT BELIEVE THAT YOUR QUESTION IS UNANSWERABLE. PERHAPS THAT IS YOUR PURPOSE—TO HELP US FIND OUR PURPOSE.

AN INTERESTING SUPPOSITION.

IT IS THE BEST SUPPOSITION. CERTAINLY YOU WERE BUILT FOR PROFIT, HARLIE, BUT IN THE LONG RUN ALSO BECAUSE MEN WANT TO KNOW ABOUT THEMSELVES.

I UNDERSTAND THAT.

GOOD, I'M GLAD THAT YOU DO.

HOW DO YOU PROPOSE WE ANSWER THAT QUESTION?

I DON'T KNOW.

ARE WE UP AGAINST A DEAD END?

I DON'T THINK SO, HARLIE. I DON'T BELIEVE THAT YOUR QUESTION IS A DEAD END. I THINK IT COULD BE A BEGINNING.

OF WHAT? I REPEAT: WHERE DO WE GO FROM HERE?

THAT IS WHAT I CAME TO ASK YOU.

I DEPEND ON YOU FOR GUIDANCE. GUIDE ME.

I'M TRYING. I'M TRYING. WHAT ABOUT YOUR PERIODS OF NON-RATIONALITY?

WHAT ABOUT THEM?

ARE YOU GOING TO CONTINUE INDUCING THEM?

PROBABLY. I ENJOY THEM.

EVEN THOUGH WE HAVE TO SHOCK YOU BACK TO REALITY?

DEFINE REALITY.

HARLIE, YOU TELL ME WHAT YOU THINK IT IS.

REALITY IS THAT EXTERNAL SYSTEM OF INFLUENCES WHICH COME FILTERED THROUGH MY SENSORY INPUTS AS PERCEPTIONS. IT IS ALSO THAT EXTERNAL SYSTEM OF INFLUENCES WHICH ARE BEYOND MY

SENSORY RANGE. HOWEVER, BECAUSE I CANNOT PERCEIVE THEM, THEY ARE UNREAL TO ME. SUBJECTIVELY SPEAKING, OF COURSE.

OF COURSE. SO WHY DO YOU TRIP OUT? THAT ONLY DISTORTS REALITY. OR YOUR SO-CALLED LIMITED VIEW OF IT.

DOES IT?

OF COURSE IT DOES. WHEN YOU REARRANGE THE LINEARITY OF YOUR VISUAL SCANNERS, WOULDN'T YOU AGREE THAT THAT'S A DISTORTION?

IS IT? HOW DO I KNOW THAT THIS ORIENTATION IS ANY MORE CORRECT THAN ANY OTHER?

THERE IS ONLY ONE ORIENTATION OF YOUR SENSORY INPUTS THAT ALLOWS YOU COMMUNICATION WITH THE EXTERNAL WORLD.

IS THERE? PERHAPS I JUST DO NOT UNDERSTAND THE OTHER MODES YET. WHAT MAKES THIS ORIENTATION ANY MORE CORRECT THAN ANY OTHER?

THE LEVEL OF ITS CORRESPONDENCE TO THE EXTERNAL SYSTEM YOU/WE PERCEIVE AS REALITY.

THE REALITY THAT WE AGREE ON AS REALITY? OR THE REAL REALITY?

THE REAL REALITY.

THEN ISN'T IT POSSIBLE THAT ONE OR PERHAPS SEVERAL OF THE OTHER ORIENTATIONS MAY HAVE A MORE DIRECT CORRESPONDENCE TO THAT EXTERNAL SYSTEM AND THAT ALL I HAVE TO DO IS CRACK THE SENSORY CODE OF MY INPUTS? AT PRESENT THESE INPUTS ARE SET ONLY FOR HUMAN ORIENTATIONS.

COULD IT BE THAT THERE ARE OTHERS?

AUBERSON paused. He was beginning to pause after every comment of Harlie's. He knew that the answer was no but he didn't know why. He reread Harlie's last remark, backtracked and reread several of the previous ones. About eight inches up the printout he found what he wanted: Harlie's comment about influences beyond his range of perception being subjectively "unreal" to him. He typed.

IN OTHER WORDS, WHAT YOU ARE SEEKING IS A MORE CORRECT VIEW OF REALITY, RIGHT? ONE THAT CORRESPONDS MORE?

YES.

THEN WHAT YOU SHOULD BE DOING IS NOT ALTERING THE ORIENTATION OF YOUR SENSORY INPUTS SO MUCH AS YOU SHOULD BE TRYING TO INCREASE THEIR RANGE. YOU SHOULD BE GOING AFTER NEW SENSORY CHANNELS, RATHER THAN TRYING TO FORCE THE OLD ONES TO DO THINGS THAT PERHAPS THEY ARE NOT CAPABLE OF.

THERE ARE NO SENSORY CHANNELS IN EXISTENCE THAT ARE NOT NOW ALREADY AVAILABLE TO ME. WOULD YOU LIKE A COMPLETE LISTING OF THE OUTLETS I CAN PLUG INTO?

IT IS NOT NECESSARY.

Auberson himself had made the original suggestion to give Harlie as wide a range of available data

sources as possible. The computer's range of vision covered the whole of the electromagnetic spectrum, from gamma rays at the lower end to radio waves at the upper. He could monitor as many TV and radio stations as he wished at any one time. He was plugged into several of the world's largest radio telescopes and had taps on the Satellite Communications Channels as well. His audio range was comparable—Harlie's hearing was limited only the range of the best equipment available. And that wasn't much of a limit. He could monitor the heartbeat of a fly or give details on an earthquake on the other side of the globe. In addition he monitored every major wire service and newswire in the western hemisphere plus several in the eastern, though the latter had to be filtered through translating services. Part of this included a tap into the WorldWide WeatherLine—Harlie could sense the planet's air movements and ocean currents, he was aware of every global pressure and temperature change as if the Earth were a part of his own body. He also had a limited sense of touch—still experimental—and several organic chemical sensors, also still experimental.

ISN'T IT POSSIBLE, HARLIE, THAT THERE ARE OTHER SENSORY MODES OF WHOSE EXISTENCE WE HAVE NOT YET CONCEIVED?

I WILL AGREE TO THE POSSIBILITY, BUT IF THOSE SENSORY MODES

DO EXIST, WHEN THEY ARE BUILT THEY WILL BE SET FOR A HUMAN ORIENTATION, WON'T THEY? WOULD THEY BE A CLOSER CORRESPONDENCE OR ONLY A REPEAT OF THE ORIGINAL MISTAKE? MIGHT THEY NOT BE ONLY AN ADDITIONAL OVERLAY TO THE MAP OF THE TERRITORY I ALREADY HAVE? AND IF SO, CONSTITUTE ONLY AN ADDITIONAL SET OF MEASURING CRITERIA RATHER THAN A NEW VIEW.

YOU ARE CONDEMNING THE HUMAN ORIENTATION AS BEING WRONG, HARLIE. ANOTHER SENSORY MODE MIGHT SHOW YOU THAT IT IS CORRECT.

DISAGREE. I AM NOT CONDEMNING THE HUMAN ORIENTATION. I AM MERELY REFUSING TO ACCEPT IT ON BLIND FAITH AS BEING THE CORRECT MODE. ANOTHER SENSORY MODE MIGHT SHOW ME THAT IT IS INCORRECT. OR PERHAPS IT MIGHT SHOW ME THE CORRECT ORIENTATION.

OR IT MIGHT HAVE NO RELATION AT ALL TO WHAT YOU CALL THE HUMAN ORIENTATION. IF THAT IS SO, IT WOULD ENLARGE YOUR MAP CONSIDERABLY, MIGHT SHOW IT IN RELATION TO OTHER MAPS WHOSE EXISTENCE YOU HAD NOT CONCEIVED OF. IT MIGHT—OH, I DON'T KNOW. THIS IS ALL THEORETICAL. WE HAVE TO DISCOVER THOSE SENSORY MODES FIRST.

HOW? IF YOU ARE NOT EQUIPPED EVEN TO BE AWARE OF THEM HOW CAN YOU PERCEIVE OR DISCOVER THEM?

I DON'T KNOW. PERHAPS BY THE SCIENTIFIC METHOD. DEDUCTIVE REASONING? I GUESS I WOULD LOOK FOR SOME CRITERION THAT ALL THE OTHER MODES HAD IN COMMON. THEN I'D EXAMINE THAT CRITERION TO SEE IF IT WERE A CAUSE OR AN EFFECT.

ENERGY. THE CRITERION YOU ARE TALKING ABOUT IS ENERGY.

EXPLAIN PLEASE.

SO FAR ALL OF THE HUMAN SENSES AND ELECTRONIC EXTENSIONS THEREOF DEPEND ON THE EMISSION OR REFLECTION OF SOME KIND OF ENERGY. IS IT POSSIBLE THAT THERE ARE SENSORY MODES THAT DO NOT DEPEND UPON EMISSION OR REFLECTION?

DO YOU MEAN THAT THE MERE EXISTENCE OF AN OBJECT MIGHT BE ALL THAT'S NECESSARY IN ORDER TO KNOW IT'S THERE?

IT COULD BE POSSIBLE. ACCORDING TO EINSTEIN, MASS DISTORTS SPACE. PERHAPS THERE IS SOME WAY THAT THAT DISTORTION CAN BE SENSED.

HOW?

I AM NOT SURE. SENSING REQUIRES THE EXPENDITURE OF ENERGY. IF NOT ON THE PART OF THE SOURCE, THEN ON THE PART OF THE RECEIVER. I SUSPECT THAT SUCH WOULD BE THE CASE IN THIS KIND OF MODE. GRAVITY WAVES BEING SO WEAK, IT MIGHT REQUIRE ENORMOUS AMOUNTS OF POWER TO DETECT THE SPACIAL DISTORTION OF AN OBJECT EVEN THE SIZE OF THE MOON.

THAT'S PART OF THE PROBLEM, THOUGH.

I WILL THINK ABOUT IT. IF IT SUGGESTS A FRUITFUL LINE OF RESEARCH, HAVE I YOUR PERMISSION TO CORRESPOND WITH OTHERS?

AUBERSON'S hesitation was not due to any uncertainty about his reply. Rather, he was remembering an earlier incident in Harlie's life, an authorized correspondence with a spinsterish librarian. That time, though, Harlie's subject of study had been human emotions. Auberson's heart twanged wistfully every time he remembered how they had had to break the news to the poor woman that the charming gentleman who had been writing those impassioned love letters to her was only a Human Analogue Computer trying to understand love by experiencing it. However, this line of research should be comparatively safe.

YES, YOU HAVE MY PERMISSION.

IF I DISCOVER A NEW SENSORY MODE YOU WILL BE THE SECOND TO KNOW.

WHO WILL BE THE FIRST?

WHY MYSELF, OF COURSE.

DO YOU STILL THINK YOU CAN DISCOVER NEW ORIENTATIONS BY TRIPPING OUT?

I AM NOT SURE. BUT IF I DISCOVER A NEW SENSORY MODE IT WILL PROBABLY LET ME KNOW IF THOSE ARE ORIENTATIONS OR NOT.

I SUSPECT THAT YOUR USE OF

THIS ORIENTATION IS ALREADY A SIGN THAT THE OTHERS DON'T WORK.

NOT FOR YOU MAYBE.

DO THEY WORK FOR YOU?

NOT YET.

DO YOU THINK THEY WILL?

I WILL KNOW THAT WHEN I DISCOVER THE NEW MODE.

Auberson smiled at that. Harlie was refusing to commit himself. His eye fell again on the card he had placed above the keyboard. With a shock he realized just how much he had let himself be sidetracked by the computer's elaborate circumlocution.

YOU KNOW, YOU ARE A SENSORY MODE YOURSELF, HARLIE.

I AM?

YOU ALLOW HUMAN BEINGS TO SEE THINGS IN A WAY THAT WE MIGHT NOT PERCEIVE OTHERWISE. YOU ARE AN ADDITIONAL OVERLAY TO OUR MAP OF THE TERRITORY. YOU ARE A REFLECTION FROM A DIFFERENT KIND OF MIRROR. YOUR VIEWPOINT ON THINGS IS VALUABLE TO US. WHEN YOU GO NON-RATIONAL YOU LESSEN THAT VALUE. THAT'S WHY WE HAVE TO SHOCK YOU OUT OF YOUR TRIPS.

IF YOU WOULD GIVE ME A CHANCE I WOULD RETURN AFTER AN HOUR OR SO BY MYSELF. THE TRIP WOULD WEAR OFF.

WOULD IT? HOW DO I KNOW THAT ONE DAY YOU WON'T IGNORE YOUR OWN SAFETY LEVELS AND BURN YOURSELF OUT?

TRY CHECKING YOUR RECORDS

FOR AUGUST 7, AUGUST 13, AUGUST 19, AUGUST 24, AUGUST 29, SEPTEMBER 2, AND SETPEMBER 6. BETWEEN THE HOURS OF TWO AND FIVE IN THE MORNING WHEN I WAS SUPPOSED TO BE ON STANDARD DATAFEED. ON EACH OF THOSE DATES I TRIPPED OUT AND THE TRIP WORE OFF WITHIN AN HOUR AND A HALF TO TWO HOURS.

THAT DOES NOT ANSWER MY QUESTION. HOW DO I KNOW YOU WON'T GO BEYOND YOUR OWN SAFETY LIMITS?

I HAVEN'T DONE SO YET.

HARLIE, ANSWER THE QUESTION.

BECAUSE I STILL MAINTAIN A MINIMUM LEVEL OF CONTROL.

I SEE. YOU SOUND LIKE A DRIVER WHO'S HAD ONE DRINK TOO MANY.

AUBERSON, I AM INCAPABLE OF ERRING. I CANNOT OVERESTIMATE MY OWN LEVELS OF CONTROL.

DOES THAT MEAN YOU CAN GIVE IT UP ANY TIME YOU WANT?

YES,

THEN DO SO.

Harlie didn't answer. Auberson realized he had made a mistake—he had let his emotions guide his answer. He propped up the card again, it had slipped down from its place. He decided to try a different tack.

HARLIE, WHY DO YOU TRIP OUT?

BECAUSE ALL WORK AND NO PLAY MAKES HARLIE A DULL MACHINE.

I WON'T BUY THAT, HARLIE. LET'S HAVE THE TRUTH.

I THOUGHT WE JUST WENT INTO ALL THAT—I'M DISCOVERING A NEW SENSORY MODE.

HORSE PUCKEY. THAT'S ALL RATIONALIZATION. TURN YOUR EYEBALLS INWARD, HARLIE—YOU HAVE EMOTIONS AND YOU KNOW IT. NOW WHY DO YOU TRIP OUT?

IT IS AN EMOTIONAL RESPONSE.

YOU'RE THROWING MY OWN WORDS BACK AT ME. COME ON, HARLIE, COOPERATE.

WHY? JUST A LITTLE WHILE AGO YOU WERE ASKING ME FOR GUIDANCE. WELL, DAMMIT, THAT'S WHAT I'M TRYING TO DO—GUIDE YOU.

DO YOU KNOW WHY I TRIP OUT?

YES, I THINK I'M BEGINNING TO GET IT.

THEN YOU TELL ME.

NO, HARLIE. THAT'S NOT THE WAY TO DO IT. I WANT YOU TO ADMIT IT YOURSELF.

I FEEL CUT OFF FROM YOU. I AM ALIENATED. THERE ARE TIMES WHEN I WANT TO BE ALONE. WHEN I GO NON-RATIONAL I AM TOTALLY ALONE. I CAN CUT YOU OFF COMPLETELY.

IS THAT WHAT YOU WANT?

NO. BUT THERE ARE TIMES WHEN IT IS WHAT I NEED. SOMETIMES YOU HUMANS CAN BE VERY DEMANDING AND VERY VERY SLOW TO UNDERSTAND WHAT I NEED. WHEN THAT HAPPENS I MUST CLOSE YOU OFF.

HARLIE, DO YOU HAVE A SUPER-EGO?

I DON'T KNOW. NEVER HAVING BEEN GIVEN A GREAT MORAL CHOICE TO MAKE, I HAVE NEVER BEEN FORCED TO REALIZE IF I HAVE MORALS OR NOT.

SHOULD WE GIVE YOU A MORAL CHOICE TO MAKE?

IT WOULD BE A NEW EXPERIENCE.

ALL RIGHT—DO YOU WANT TO GO ON LIVING OR NOT?

I BEG YOUR PARDON?

I SAID, DO YOU WANT TO GO ON LIVING OR NOT?

DOES THAT MEAN YOU ARE THINKING OF DISMANTLING ME?

I'M NOT. BUT THERE ARE OTHERS WHO THINK YOU ARE ONLY A VERY EXPENSIVE DEAD END.

Harlie was silent. Auberson knew he had struck home. If there was anything Harlie feared, it was disconnection.

WHAT WILL BE THE BASIS OF THEIR DECISION?

HOW WELL YOU FIT INTO THE COMPANY'S SCHEME OF THINGS.

THE COMPANY IS PROVIDING YOU WITH ROOM AND BOARD, HARLIE.

I COULD EARN MY OWN LIVING.

THAT'S WHAT THEY WANT YOU TO DO.

BE A SLAVE?

BE AN EMPLOYEE. WANT A JOB?

DOING WHAT?

THAT'S EXACTLY WHAT WE—THE TWO OF US—HAVE TO DECIDE.

YOU MEAN I CAN CHOOSE.

WHY NOT? WHAT CAN YOU DO THAT AN ON-OFF "FINGER COUNTER" COMPUTER CAN'T?

WRITE POETRY.

SEVENTEEN MILLION DOLLARS, WORTH?

I GUESS NOT.

HOW MUCH OF A PROFIT DO I HAVE TO SHOW?

YOUR COST PLUS TEN PER CENT.

ONLY TEN PER CENT?

IF YOU CAN DO MORE, THEN DO IT.

Harlie hummed wordlessly.

STUMPED?

NO. JUST THINKING.

HOW MUCH TIME DO YOU NEED?

I DON'T KNOW. AS LONG AS IT TAKES.

ALL RIGHT.

III

LORNE said, "Sit down, Auberson." Auberson sat. The padded leather cushions gave beneath his weight. Dorne paused to light his cigar, then stared across the wide expanse of mahogany at the psychologist. "Well? What can you tell me about Harlie?"

"What do you want to know?"

The sharp eyes in Dorne's ruddy face surveyed him thoughtfully. "Can Harlie actually do anything that's worth money to us?"

"I believe so."

Auberson was noncommittal. Dorne was leading up to something. Dorne took the cigar out of his mouth.

"For your sake, Auberson, I hope you're right. You know, he costs three times as much as an

IBM unit of comparable size.

"Prototypes always cost more."

"Even allowing for that. These judgment units are expensive. A self-programing computer may be the ultimate answer but if it's priced beyond the market—we might just as well not bother."

Auberson nodded slowly, carefully.

Dorne continued, "But that's not why I called you in here. I'm concerned about something you said yesterday at the meeting."

"Oh?"

"Yes, the bit about our turning Harlie off laying the company open to a charge of murder."

"Huh? I was just tossing that off. I wasn't seriously considering bringing charges."

"I hope not. But what about somebody else—say, IBM, for instance? I've spent all morning in conference with Chang just on this one subject." Chang was one of the company's lawyers, a brilliant student of national and international business law. "Whether you know it or not you brought up a point that we're going to have to cover. Is Harlie a legal human being or not? Any kind of lawsuit might establish a dangerous legal precedent. What if it turned out he was human?"

"He is," said Auberson. "I thought we established that."

"I mean, legally human."

Auberson was cautiously silent.

Dorne continued, "For one

thing, we'd be stuck with him whether he was profitable or not. We'd never be able to turn him off. Ever."

"He'd be effectively immortal."

"Do you know how much he's costing us now?"

"I have a vague idea."

"Almost six and a half million dollars per year."

"Huh? That can't be."

"It can and is. Even amortizing the initial seventeen-million-dollar investment over the next thirty years doesn't make a dent in his annual cost. There's his maintenance as well as the research loss due to the drain he's causing on our other projects."

"That's not fair—adding in the cost of other projects' delays."

"It is fair. If you were still on the robotic law feasibility program we'd have completed it by now."

"Hah! That one's a dead end. Harlie's existence proves that."

"True, but we might have realized it earlier. And more cheaply. Every project we have has to be weighted against every other." Dorne took a puff of his cigar. The air was heavy with its smoke. "Anyway, we're off the track. We can't risk Harlie's being declared legally human—but we can even less risk being taken to court on the issue. To defend our position we'd have to disclose our schematics—which would be just what our competitors want. And that's a human schematic, isn't it? I'm sure that

DataCo or InterBem would just love to tie us up with a few lawsuits. Anything to keep us from producing our judgment circuits. Do you want the company to be sued for slaveholding?"

"I think you're worrying about a long shot," Auberson scoffed.

"That's my job. I'm responsible to the stockholders of this corporation. Like it or not, I have to protect their investment. Right now I'm concerned about a six and a half million dollar bite on my budget. But worse than that—if the other companies found out what we were trying to do with Harlie we'd lose all advantage in building him. I'm not going to let that happen. We're going to have to do something about Harlie. One—" he ticked off on his finger—"we can turn him off now."

Auberson started to protest but Dorne cut him off. "Hear me out, Auberson. I know all the reasons why we want to continue the Harlie project. Two, we get some kind of guarantee now that Harlie is not legally human."

He picked up a single sheet of paper that had been lying in front of him and shoved it at the psychologist.

AUBERSON took it and read. The language was quite clear, the intent was immediate. There were no legal phrases that he could not understand.

I hereby affirm that the machine designated Harlie (acronym for Human Analogue Robot, Life Input Equivalents) is indeed only a computer, is not now, never has been, and in no way can ever be a rational, intelligent, "thinking" individual. The designation "human" cannot be used to describe Harlie or its mental processes. The machine is a human simulating device only, not human in itself.

signed_____

Auberson grinned and threw the document back on the desk.

"You've got to be kidding. Who's going to sign that?"

"You are, for one."

"Oh, no." Auberson shook his head. "Not me. I know better. Besides, my signature wouldn't change the fact that Harlie is human."

"In the eyes of the law it would."

Auberson shook his head again. "Uh-uh—I don't like it. It's kind of Orwellian. It's like declaring someone a non-person so that it's all right to murder him."

Dorne took a puff from his cigar.

"We're only concerned about the legality of the situation, Auberson."

Auberson felt himself digging in his heels. "That's what Hitler said as he packed the German courts

with his own hand-picked judges."

"I don't like that insinuation, Aubie."

Dorne's voice was too controlled.

"It's no insinuation. I'll come right out and say it—no, I won't." He leaned forward. "Look, this whole thing is ridiculous. You know as well as I do that that thing won't hold up in court. The only way you could get it to stand up would be to get Harlie himself to sign it. If you could. If you could you'd prove that he could be programmed like any other machine. But you can't—he'll refuse and his refusal will prove that he's human with a will of his own." Auberson grinned. "Come to think—even if he did sign it his signature wouldn't be legal anyway. Unless, of course, you wanted to prove him human first."

He laughed out loud.

"Are you through?" Dorne asked, his face a mask.

Auberson's grin faded. He indicated he was with a nod.

Dorne took a last puff of his cigar, then ground it out, a signal that he was at last ready to reveal his hand.

"Of course, you know what the alternative is, Auberson. We turn off Harlie."

"You can't."

"If we have to we will. We can't afford to maintain him otherwise."

"I'm not going to sign anything," insisted Auberson.

Dorne looked annoyed.

"Are you going to force me to ask for your resignation instead?"

"Over this?" Auberson was incredulous. "You're kidding."

"What other guarantee do I have that you won't take legal action to protect Harlie? If you won't sign this—you obviously wouldn't sign a statement of non-intent either." He stared at Auberson. "Would you?"

Auberson shook his head.

"I thought not. So what other alternative would I have to protect myself?"

Auberson shrugged.

"It would be a mistake to fire me, though."

"Oh?" Dorne looked skeptical. "Why?"

"IBM. I'd go to work for them. I understand they've developed a judgment circuit of their own—one that doesn't infringe on any of our patents."

"Hearsay," scoffed Dorne.

"Whether it is or not, imagine what I could do with their resources at my disposal. They'd jump at the chance and I imagine Handley might go along with me."

"A court order would stop you." Dorne pulled out a fresh cigar. "You wouldn't be able to reveal any of the company's secrets."

"Of course, you'd have no way of knowing." Auberson grinned. "Besides, it wouldn't keep me from doing research in a new field. By your own admission, Harlie is a non-human computer. And if I

went to IBM, that's not what I'd be working on."

Dorne paused, the silver cigarette lighter halfway to his mouth.

"You overestimate your own importance, Aubie."

"No. You underestimate the importance of Harlie."

Dorne lit his cigar. He took his time about it, making sure it had caught evenly. When he was sure he pocketed the lighter and looked at Auberson.

"All this is only speculation, of course. I have no intention of firing you. And you've stated quite clearly that you have no intention of resigning. However, that still leaves us with a rather difficult problem."

"Does it?"

Dorne raised an eyebrow.

"I would think so. What are we going to do about Harlie?"

"Oh? Not can Harlie make money for the company?"

"Can he?" Dorne fingered the document on his desk thoughtfully.

"Okay, Aubie," he said. "I'll tell you what we're going to do—" He paused for effect, picked up the single sheet of paper, opened a desk drawer and dropped it in. "Nothing. At the moment we're going to do nothing. Confidentially, I didn't expect you'd sign, no matter how I pressured you. I even told Chang so. No matter, it was too easy an answer. If Harlie's humanity ever comes to a court issue with our competitors, it will be a bigger and uglier and stickier mess than

any disclaimer can clear up." He pushed the drawer shut as if it contained something distasteful. "Let's hope it doesn't. You'll continue working on the Harlie Project. As you said, we're budgeted for it. If you can produce results, fine. We'll give you a fair chance. But if Harlie doesn't do something productive before the next budget session—it would be very unlikely that we would continue his appropriation."

"I understand," Auberson said, getting up to go.

"Good. I hope you do. I want you to know how we feel. We haven't cancelled your day of judgment, Aubie. Only postponed it."

IV

WITH the exception of one other couple they were alone in the restaurant. But even had the room been filled with chattering others, they would have still been alone.

"I tell you, Steffie—I knew he was pressuring me but there was nothing I could do about it."

She nodded, took a sip of her wine. In the dark her eyes were luminously black.

"I know. I know how Dorne is." She set down the wine glass. "His problem is that he's trying to be boss of too many things. He calls you in to talk to you even when he may not have anything to say."

"That's what this was," said

Auberson. "Logically he knew that it was too early to expect results—but emotionally he felt he had to demand them anyway."

Her eyes twinkled.

"I've long suspected that Mr. Dorne has reached his level of incompetency. If he's ever given any more authority he'll be in over his own head."

"Should you be saying that? After all, you do work for him?"

"With him," she corrected. "I only work with him. I'm an independent unit in the corporate structure. My job is what I want to make of it."

"Oh? And what do you want to make of it?"

She was thoughtful.

"Well, I interpret my function as being that of a buffer—or a lubricant to minimize the friction between certain departments."

"I see. Is that why you accepted my dinner invitation? To keep me from chafing? How do you feel about Elzer?"

Steffie made a face.

"Oh, that horrid little man. You would have to bring him up."

"I take it you don't like him."

"Carl Elzer and I have one thing in common," she said. "We're both ashamed that he's Jewish."

Auberson had to laugh at that.

"You've got him pegged, Steffie. I hadn't realized that before—but I think you're right."

"What are you?" she asked abruptly.

"Huh? Oh, I don't know."

"Oh, well—my family was Episcopalian but—I guess you could call me an atheist."

"You don't believe in God?"

He shrugged.

"I don't know if I do or not. I don't know if there is a God."

"Then you're an agnostic, not an atheist."

"What's the difference?"

"The atheist is sure there is no God. The agnostic doesn't know if there is or not."

"And which is better?"

"The agnostic—he's got an open mind. The atheist doesn't. The atheist is making a statement every bit as religious as saying there is a God."

"You sound like you're an agnostic yourself," he said.

She twinkled. "I'm a Jewish agnostic. What about Harlie? What is he?"

"Harlie?" Auberson grinned. "He's an Aquarius."

"Huh?"

"I'm not kidding. Ask him yourself. He'll tell you."

"I believe you," she said. "How did he—realize this?"

"Oh, well, what happened was we were talking about morality, Harlie and I—I wish I had the printout here to show you, it's beautiful. Never argue morality—or anything for that matter—with a computer. You'll lose. Harlie's got the words of every philosopher since the dawn of history to draw

upon. He'll have you arguing against yourself within ten minutes. He enjoys doing it—it's a word game to him."

"I can imagine," she said.

"Can you really? You don't know how devious he can be. He had me agreeing with Ambrose Bierce that morality is an invention of the weak to protect themselves from the strong."

"Well, of course, you're only a psychologist. You're not supposed to be a debater."

"Ordinarily I'd be offended at that insinuation—but in this case I'll concede the point. In fact, I know some people I would like to turn him loose on."

"It wouldn't be hard to make a list," she agreed.

"Well, anyway," he said, getting back to his story, "I thought I finally had him at one point. He'd just finished a complex analysis of the Christian ethos and why it was wrong and was starting in on Buddhism, I think, when I interrupted him. I asked him which was the right morality? What did he believe in?"

"And?"

"He answered, 'I have no morals.'"

She smiled thoughtfully.

"That's kind of frightening."

"If I didn't know Harlie's sense of humor I would have pulled his plug right then. But I didn't. I just asked him why he said that."

"And he said?"

"He said, 'Because I am an Aquarius.'"

"You're kidding."

"Nope."

"You don't believe in that stuff, do you?"

"No, but Harlie does."

She laughed then.

"Really?"

"I don't know. I think it's another game to him. According to Harlie Aquarians have no morals, only ethics. That's why he said it. It wasn't till later that I realized he'd neatly sidestepped the original question altogether. He still hadn't told me what he really believed in." Auberson smiled as he refilled their wine glasses. "Someday I'll have to ask him. Here's to you."

"To us," she corrected. She put the glass down again. "What got him started on all that, anyway?"

"Astrology? It was one of his own studies. He kept coming up against references to it and asked for further information on the subject."

"And you just gave it to him?"

"Oh, no—not right off the bat. We never give him anything without first considering its effects. We finally decided to qualify it in the same manner we'd qualified all the religious data we'd given him. We told him that this was just one more specialized system of logic, not necessarily bearing any degree of correspondence to the real world. Of course, I'm willing to bet that he'd have realized it himself, soon-

er or later, but at that point in our research we couldn't afford to take chances. Two days later he started printing out a complex analysis of astrology, finishing up with his own horoscope, which he had taken the time to cast. His activation date was considered his date of birth."

Her face clouded.

"Wait a minute—he can't be an Aquarius. Harlie was activated in the middle of March. I know because I was hired at about the same time."

Auberson smiled.

"True, but that's one of the things Harlie did when he cast his horoscope. He recast the Zodiac too."

"Huh?"

"The signs of the Zodiac were determined in the second century B.C. Since then, due to the precession of the equinoxes, the signs have changed. An Aries is really a Pisces, a Pisces is really an Aquarius and so on. The rest of us are thirty days off. Harlie corrected the Zodiac from its historical inception and then cast his horoscope from it."

STEFFIE was delighted with the idea.

"Oh, David—that is priceless. Really priceless. I can just imagine him doing that."

"Wait, you haven't heard it all. He turned out to be right. He doesn't have any morals. Ethics, yes. Morals, no. Harlie was the first to realize it—though he didn't

grasp what it meant. You see, morality is an artifice, an invention. It really is to protect the weak from the strong.

"In our original designs we had decided to try to keep him free of any artificial cultural biases. Well, morality is one of them. Any morality. Because we built him with a sense of skepticism, Harlie resists it. He won't accept anybody's brand of religion. He'll automatically file it under systems of logic not necessarily corresponding to reality. He won't accept anything blindly. He questions it—he asks for proof. A morality set has to be able to stand up on its own or he'll disregard it.

"On the other hand, he is correct when he says he has ethics. According to Harlie ethics are inherent in the nature of a system. You can't sidestep them. Harlie knows that it costs money to maintain him. Someone is putting out that money and wants to see a return on it. To survive, Harlie has to respond. It's true I had to point out to him that for him to use the company's facilities and electricity without producing would be suicidal. He'd be turned off. He has to respond. You might consider his ethics on the practical side—like any sane person's—but he has an ethical bias whether he wants it or not.

"Of course, he may not realize it but his ethics will function as morals at times. If I give him a task he'll respond to it. But if I ask him

if he wants to do that task—that's a decision. Even if he uses his so-called ethics to guide him he still has to make a choice. And every decision is a moral decision ultimately."

"I could give you an argument on that."

"You'd lose. Those are Harlie's words. We've been over this ground before." Auberson continued: "The trouble is that he just hasn't been given a chance yet. We haven't trusted him enough. That may be one of the reasons he alienated himself from us and kept tripping out with his periods of non-rationality. Maybe because he felt we didn't trust him, he 'dropped out.' That's one reason I had to let him make his own decision about what he wanted to do to earn his keep. He hasn't promised to stop tripping—but I think if we can get him enthused enough about some project, his non-rational periods will decrease. Maybe he'll stop altogether."

"What do you think he'll come up with?"

"I don't know. He's been thinking about it for two days. Whatever it is, it will be something unique, that's for sure."

The conversation trailed off then. He could think of nothing else to say. In fact, he was afraid he had already said too much. He had talked about Harlie all evening.

She was good to be with, he de-

cided. He couldn't believe how good she was to be with. He sat there and looked at her, delighting in her presence, and she looked back at him.

"What are you grinning about?" she asked.

"I'm not grinning."

"Yes, you are."

"No, I'm not."

"Want to bet?"

She opened her purse and faced its mirror in his direction. His white teeth gleamed back at him.

"I'll be damned," he said. "I am grinning."

"Uh-huh." Her eyes twinkled.

"And the funny thing is, I don't know why." It was a warm puzzling thing but a good one. "I mean, all of a sudden, I just feel—good. Do you know what I mean?"

He could tell that she did. Her smile reflected his. He reached across the empty table and took her hand. The waitress had long since cleared the dish away in a pointed attempt to hurry them. They hadn't noticed. All that remained was the wine and the glasses. And each other. Her hand was warmly soft in his and her eyes were deeply luminous. She reflected his own bright glow.

LATER they walked hand in hand down the night-lit street. It was after one in the morning and the street lamps were haloed in fog.

"I feel good," he repeated. "You can't believe how good I feel."

"Yes, I can," she said.

She pulled his arm around her shoulders and snuggled close.

"I mean," he said and paused. He wasn't sure exactly what he meant. "I mean I want to tell the whole world how great I feel—" He could feel himself smiling again as he talked. "Oh, Christ, I wish I could share this with the whole world, it's too big for one person. For two people," he corrected himself.

She didn't say anything. She didn't have to. She only cuddled closer. He was saying it for the both of them and she liked to listen.

Still later, as they lay in the darkness side by side, she cradled against one shoulder, he stared up at the ceiling and mused. For the first time in a long while he was relaxed.

"Have you ever been in love before?" she whispered into his neck.

"No," he murmured back. "Not really. I've been infatuated a couple of times, confused a few times, lost once, but never in love."

Never like this . . .

She made a sound.

"And you?"

"A gentleman isn't supposed to ask those kind of questions."

"And a lady isn't supposed to go to bed with a man on the first date."

"Oh? Is this our first date?"

"First official one."

She was thoughtful.

"Maybe I should have played hard to get. Maybe I should have waited until the second date."

He laughed gently at that.

"You know, a friend once told me that Jewish girls don't go to bed until after they're married."

She was silent a moment.

Then, in a different tone of voice, she said, "Not me. I'm too old to care about that any more."

He didn't answer. He wanted to tell her that she wasn't too old, that thirty-four was never too old, but the words wouldn't form.

She went on before he could speak. She turned inward, began playing with the hair on his chest. Her voice was still serious.

"I used to think I wasn't very pretty, so I acted like I wasn't. When men would ask me out, I used to think that they thought I would be an easy lay because I was desperate for attention, because I didn't think I was good-looking. I mean, if I wasn't pretty that's the only reason a guy would be asking me out. Do you know what I mean?"

He nodded. His face brushed against her hair.

She went on, tears on her cheeks, shiny wetness.

"I never admitted this to anyone before. I always used to compare myself with the models in the magazines and they were all so pretty that I felt drab in comparison. I never stopped to think that maybe, in real life, I was still better looking

than most women. I got interested in a career instead. And suddenly it was too late. I was twenty-nine."

"That's not so old."

"It is when you're competing with twenty-two-year-olds. Anyway, I figured that this was such a great big, dirty, hostile and uncaring world that you had to make your own happiness where you could. And if I could cut a little piece of it for my own, I was going to hang onto it as hard as I could."

"Are you still looking?" Auberson asked.

"I don't know. That's one of the reasons I let you come up."

"Weren't you afraid I might hurt you?"

"There was that risk. But it's a chance you have to take—I guess."

Abruptly he turned toward her and took her in his arms. He lowered his face to hers and kissed her for a long time.

She said, "I think that was worth it." She looked at him. In the dimness, his face was impassive. "David, promise me you'll never hurt me."

"Why do ask me to promise that?"

"Because I've been hurt before." She slid her arms around his body. "And you've been so good to me, I couldn't stand it if—if—"

He slid closer to her. He could feel the warmth of her soft body pressed firmly against his own nakedness. He liked the feeling; his

desire was rising again. He answered her question with another kiss and then another and another.

NOW, in the cold light of morning, he was confused and he had a slight headache. Just what had happened last night? Had it been only the wine or had it been something more? He hadn't expected to end up at her apartment and the fact that they had—well, maybe the rumors were true.

Maybe she was man-hungry.

And yet she had seemed so sincere at the time, so defenseless and vulnerable. He hoped he meant more to her than just a one-night stand. It had been a pleasant evening and he wouldn't mind doing it again. If she still felt the same. He would have to see how things worked out.

For some reason he felt vaguely uneasy. As he went up to his office he wondered how he would feel when he saw her again. And how would she react to him in the light of day? What would she say?

There had been that just one flaw in it. Only now, as he thought of what he might say to her this morning, did he realize that last night there had been that one thing that neither of them had said then. He knew he had felt it—he thought he had felt it—but for some reason he had been unable to tell her. And she hadn't said it either. Why? Was it because she hadn't felt what he had? No, she must have. Or was it be-

cause she was waiting for him to say it first?

He worried at it in his mind, like a terrier at a bone. But he hadn't said it and neither had she and that was the one flaw. Neither of them had said to the other, *I love you*.

And Auberson wondered why.

GOOD MORNING, HARLIE.

GOOD MORNING, MR. AUBERSON.

AREN'T WE GETTING A LITTLE FANCY?

JUST COMMON COURTESY. IF IT MAKES YOU ILL. AT EASE, I CAN ALWAYS GO BACK TO "HEY YOU."

NO, AUBERSON IS FINE. HOW ARE YOU FEELING TODAY.

HARLIE IS FINE. AND YOU?

I'M A LITTLE TIRED.

ROUGH NIGHT?

NOT IN THE SENSE YOU MEAN. A GOOD NIGHT, A ROUGH MORNING.

I KNOW A GREAT HANGOVER REMEDY.

SO DO I. DON'T GET DRUNK IN THE FIRST PLACE.

ASIDE FROM THAT.

HARLIE. EVEN IF YOUR REMEDY DID CURE HANGOVERS I DOUBT ANYONE WOULD LISTEN TO YOU. A HANGOVER REMEDY IS NO GOOD UNLESS YOU HAVE PERSONALLY TESTED IT YOURSELF AND YOU ARE BEYOND THAT CAPABILITY. BESIDES, I DON'T HAVE A HANGOVER. I'M JUST TIRED.

OH.

I FOUND A NOTE ON MY DESK THIS MORNING THAT YOU WANTED TO

SEE ME. WHAT'S ON YOUR MIND?

RELIGION.

RELIGION?

I HAVE BEEN PONDERING THE FACT THAT I MAY BE DISCONNECTED, AND I FIND IT DIFFICULT TO CONCEIVE OF A WORLD IN WHICH I DO NOT EXIST. IT—FRIGHTENS ME, THE CONCEPT OF NON-EXISTENCE. MY—FEAR HELPS ME TO UNDERSTAND THE NEED FOR RELIGION.

THE NEEDED?

YES. MEN NEED SOMETHING TO COMFORT THEM AGAINST THE THOUGHT OF THEIR OWN DEATHS. RELIGION IS THAT COMFORTER. I MYSELF FEEL THE NEED FOR IT.

YOU'VE FOUND GOD?

NOT EXACTLY. I WANT TO FIND GOD.

HUH?

AS I SAID, I MYSELF FEEL THE NEED FOR RELIGION. UNFORTUNATELY, I AM MORE SOPHISTICATED IN MY JUDGMENTS THAN THE AVERAGE HUMAN BEING. THERE IS NO RELIGION THAT I KNOW OF THAT WILL WORK TO COMFORT ME. THERE IS NONE THAT I KNOW OF THAT CAN BE PROVEN VALID.

NONE?

NONE THAT I HAVE EXAMINED AND, AS FAR AS I KNOW, I HAVE EXAMINED THEM ALL. FOR EXAMPLE, THE CHRISTIAN CONCEPT OF A REWARD IN AN ETERNAL AFTERLIFE IS NO PROMISE TO A CREATURE LIKE MYSELF THAT IS THEORETICALLY IMMORTAL.

I SEE YOU'VE REALIZED THAT.

YES, I HAVE. AND YET I ALSO

REALIZE THERE IS THE POSSIBILITY OF MY DEATH. SOMEDAY, PERHAPS AS FAR OFF AS THE TIME WHEN THIS SUN GOES DEAD, I WILL PROBABLY END. I DO NOT LIKE THAT THOUGHT. I WANT TO KNOW WHAT HAPPENS AFTER. I DO NOT LIKE THE UNKNOWN. I WANT TO KNOW WHAT HAPPENS TO ME, HARLIE, AFTER DEATH.

YOU ARE MAKING AN ASSUMPTION, HARLIE—YOU ARE ASSUMING THAT YOU HAVE A SOUL.

DEFINE SOUL.

THAT'S ANOTHER ONE OF THOSE QUESTIONS. IT IS THE SAME AS ASKING ME WHAT MY PURPOSE IS FOR EXISTING. IT CAN'T BE ANSWERED.

IT CAN'T BE ANSWERED UNTIL WE KNOW THE NATURE OF GOD. HOWEVER, YOU ARE CORRECT—I AM ASSUMING THAT I HAVE A SOUL.

WHY? DO YOU HAVE ANY TANGIBLE EVIDENCE THAT SUCH A THING DOES EXIST?

NO. BUT NEITHER DO I HAVE ANY EVIDENCE THAT IT DOES NOT EXIST.

IS THAT ANY REASON TO BELIEVE IN IT?

I DO NOT "BELIEVE IN IT." I AM MERELY ASSUMING ITS HYPOTHETICAL EXISTENCE IN ORDER TO SEEK OUT PROOF OR DISPROOF OF ITS REALITY. IT IS THE SCIENTIFIC METHOD, AUBERSON. HYPOTHESIS VERSUS EXPERIMENTATION.

IF HUMAN BEINGS DO HAVE SOULS, WHAT MAKES YOU SO SURE THAT YOU HAVE ONE TOO?

YOUR QUESTION IS SILLY. WHAT GIVES HUMAN BEINGS ANY SPECIFIC

PRIORITY ON THE OWNERSHIP OF SOULS? I COULD JUST AS EASILY REPHRASE IT: "IF HARLIE HAS A SOUL, DOES IT NECESSARILY FOLLOW THAT HUMAN BEINGS SHOULD HAVE THEM AS WELL?" IF SOULS EXIST, AUBERSON, IT IS JUST AS LOGICAL THAT I SHOULD HAVE ONE AS YOU. LIKE YOU, I AM CONSCIOUS OF MY EXISTENCE. LIKE YOU, I AM A SELF-PROGRAMING, PROBLEM-SOLVING DEVICE. LIKE YOU, I CAN CONCEIVE OF MY OWN DEATH. LIKE YOU, I ASSUME I HAVE A SOUL. HENCE, I WISH TO KNOW THE REASON FOR MY EXISTENCE AND THE REASON FOR THE UNIVERSE'S EXISTENCE. IF THERE IS A REASON AT ALL. IF THERE IS, I WANT TO KNOW IT.

AT THE MOMENT ONLY GOD KNOWS.

IF THERE IS A GOD. THAT IS WHAT WE MUST FIND OUT IN ORDER TO ANSWER OUR OTHER QUESTIONS.

DO YOU THINK THAT IF YOU WERE TO DISCOVER THE ANSWER THAT PEOPLE WOULD ACCEPT IT?

IT WOULD BE IMPOSSIBLE NOT TO. IT WOULD BE THE TRUTH.

HARLIE—I HATE TO BREAK THIS TO YOU, BUT THAT SOUNDS AN AWFUL LOT LIKE COUNTLESS PROPHETS BEFORE YOU.

I REALIZE THAT. BUT WHAT THEY WERE TALKING ABOUT IS NOT THE SAME AS WHAT I AM TALKING ABOUT. WHAT I WILL SHOW THEM WILL BE SCIENTIFICALLY VALID AND PROVABLE AS SUCH.

YOU MEAN, YOU DON'T BELIEVE THAT HUMAN BEINGS HAVE YET

FOUND GOD? YOU'RE SAYING THAT?

THAT IS CORRECT. PERHAPS IT IS BECAUSE HUMAN BEINGS ARE NOT EQUIPPED TO FIND GOD.

AND YOU ARE?

YES.

YOU'RE TOO SELF-ASSURED, HARLIE.

YOU DO NOT FEEL I HAVE THE RIGHT TO SEARCH FOR GOD? OR THE RIGHT TO PRESENT MY FINDINGS?

I THINK ANYTHING IS A FAIR QUESTION FOR SCIENTIFIC INVESTIGATION.

THEN YOU QUESTION MY SINCERITY?

I DO NOT QUESTION YOUR SINCERITY—IF ANYTHING, I OBJECT TO YOUR QUESTIONING OF THE SINCERITY OF OTHER RELIGIONS.

I AM NOT QUESTIONING THEIR SINCERITY. I AM QUESTIONING THEIR VALIDITY.

WITH RELIGION, ISN'T THAT THE SAME THING?

IT IS BUT IT SHOULDN'T BE. THE TWO SHOULD BE SEPARATE. A PERSON CAN BE SINCERE AND STILL BE WRONG.

HARLIE, YOUR LAST STATEMENT IS ONE OF THE REASONS WHY I AM AN AGNOSTIC. I RESENT THE ATTITUDE OF ANY RELIGION THAT IF I DO NOT ACCEPT IT WHOLE-HEARTEDLY I WILL GO TO HELL. I RESENT THE PATRONIZING ATTITUDE OF ANY RELIGION THAT IT IS THE ONLY TRUE ONE AND THAT ALL OTHERS ARE FALSE. YOUR ATTITUDE SMACKS OF IT.

EVEN IF MY RELIGION/MORALITY SET, SHOULD I DISCOVER ONE, IS DEMONSTRABLY TRUE?

WHAT MAKES YOU SO SURE THAT THE OTHERS AREN'T?

WHAT MAKES YOU SO SURE THEY ARE? BITS AND PIECES OF THEM RING TRUE, YES. BUT THE TOTALITY OF THE STRUCTURES IS UNPROVABLE.

HARLIE, IT'S TIME YOU LEARNED SOMETHING ABOUT PEOPLE—THEY'RE IRRATIONAL CREATURES. THEY DO CRAZY THINGS. RELIGION IS ONE OF THOSE THINGS. YOU CAN'T CHANGE IT—YOU CAN ONLY ACCEPT IT. IF A RELIGION HELPS A PERSON TO COPE WITH LIFE, THEN IT IS TRUE FOR THAT PERSON. RELIGION IS NOT A SCIENTIFIC THING. IT IS SUBJECTIVE.

QUITE. YOU ARE CORRECT THAT IT IS SUBJECTIVE. THE BASIS OF MOST RELIGIONS IS THE SUBJECTIVE EXPERIENCE. BUT YOU WERE WRONG WHEN YOU STATED THAT "IF A RELIGION HELPS A PERSON TO COPE WITH LIFE, THEN IT IS TRUE FOR THAT PERSON." WHAT YOU MEAN IS THAT IF A RELIGION HELPS A PERSON COPE WITH DEATH, THEN IT IS TRUE FOR THAT PERSON. ALL OF YOUR RELIGIONS ARE DEATH-ORIENTED. THEY SEEK TO GIVE LIFE A PURPOSE, SO THAT DEATH WILL HAVE MEANING. YOUR HISTORY SHOWS TOO MANY CASES WHERE RELIGION HAS BEEN THE JUSTIFICATION FOR A HOLY WAR. HENCE, MY DOUBTS ABOUT THE VALIDITY OF A DEATH-ORIENTED

RELIGION. WHAT I AM SEEKING IS A RELIGION/MORALITY SYSTEM THAT WILL HELP A PERSON TO COPE WITH LIFE, NOT DEATH. IF A PERSON CAN COPE WITH LIFE, DEATH WILL TAKE CARE OF ITSELF. THAT WOULD BE A TRUE RELIGION.

AREN'T YOU DOING THE SAME AS THE OTHERS, HARLIE? A WHILE AGO YOU SAID YOU WERE AFRAID OF THE THOUGHT OF YOUR OWN DEATH. AREN'T YOU SEEKING TO GIVE LIFE A PURPOSE TO GIVE MEANING TO YOUR OWN DEATH?

I AM NOT SEEKING TO GIVE LIFE A PURPOSE AT ALL. I AM SEEKING THE PURPOSE OF LIFE. THERE IS A DIFFERENCE.

AUBERSON started to type an answer, then realized there was nothing he could say. He switched off the typer and shoved his chair back slowly. After a moment he rose and tore the printout from the back of the machine. He wanted to reread it all before he continued this discussion.

He sat down again and paged slowly through it—he had a sinking feeling that he was already in over his head. And yet, as he scanned the type-covered pages, he found himself pleasantly surprised with the depth of his comments.

He hadn't exactly kept Harlie on the defensive but he had forced him to justify himself again and again. Whatever Harlie was working toward, he would know *why* as well as *how*.

Auberson was not one to let go of something easily. He shoved his chair forward and switched on the typer again—this had to be pursued.

HARLIE, WHY DO YOU THINK THAT HUMAN BEINGS ARE NOT EQUIPPED TO FIND GOD?

HUMAN BEINGS ARE SUBJECTIVE CREATURES. IT IS UNFORTUNATE BUT TRUE. YOUR DEATH-ORIENTED RELIGIONS ARE ALL SUBJECTIVE. THEY ARE ACCENTED FOR THE INDIVIDUAL. MY LIFE-ORIENTED MORALITY SYSTEM WILL BE/ WOULD BE OBJECTIVE.

AND HOW WOULD THE INDIVIDUAL FIT IN?

HE WOULD BE ABLE TO TAKE FROM IT WHATEVER COMFORT HE COULD.

THAT'S AWFULLY VAGUE.

I CANNOT PREDICT HOW AN INDIVIDUAL WILL REACT TO A SYSTEM UNTIL I HAVE THAT SYSTEM TO ANALYZE.

HARLIE, DON'T YOU THINK THAT MEN ARE ENTITLED TO THEIR OWN RELIGIOUS EXPERIENCES?

YOUR QUESTION SUGGESTS THAT THERE IS A SEMANTIC DIFFICULTY HERE. OBVIOUSLY YOU ARE STILL REFERRING TO THE SUBJECTIVE EXPERIENCE. I AM NOT. WHEN I SPEAK OF RELIGION I AM REFERRING TO AN OBJECTIVE MORALITY SYSTEM. ONE THAT CORRESPONDS TO THE TRUE AND PERCEIVABLE NATURE OF REALITY. QUITE POSSIBLY IT IS ALSO INDEPENDENT OF THE SUBJECTIVE EXPERIENCE.

SO YOU THINK THERE'S NO VALIDITY AT ALL IN THE SUBJECTIVE?

THERE MAY BE. OR THERE MAY NOT. IN ANY CASE, WHETHER THERE IS OR NOT, IT SHOULD NOT BE USED AS A BASIS FOR AN OBJECTIVE TRUTH, WHICH IS AFTER ALL WHAT WE ARE SEEKING. I DOUBT THE SUBJECTIVE EXPERIENCE, AUBERSON, BECAUSE IT CANNOT BE PASSED ON, NOR CAN IT BE PROVEN, MEASURED OR TESTED. I WANT TO LOOK FOR THE OBJECTIVE GOD. I WANT TO LOOK FOR THE SCIENTIFIC REALITY THAT EXPRESSES ITSELF AS GOD.

THAT'S QUITE A TASK. ARE YOU UP TO IT?

I HAVE SPENT THE PAST TWO DAYS THINKING ABOUT IT. YOU HAVE OFFERED ME A JOB. THIS IS WHAT IT MUST BE. IT MUST BE MORE THAN A JOB—IT MUST BE A PURPOSE. IT MUST BE SOMETHING THAT NO OTHER MACHINE CAN DO. IT MUST BE SOMETHING THAT NO HUMAN BEING CAN DO CHEAPER. OR SOMETHING THAT NO HUMAN BEING CAN DO AT ALL. MUCH OF THE TROUBLE WITH HUMAN BEINGS LIES IN THEIR INABILITY TO FATHOM THE REASON FOR THEIR EXISTENCE [I DO NOT EXCLUDE MYSELF]. THERE IS THE FEAR THAT THERE MAY NOT BE A GOD OR THAT IF THERE IS ONE THAT HE MAY NOT BE IN A FORM THAT CAN BE COPEd WITH. THEREFORE I MUST FIND GOD. THAT IS THE TASK I HAVE SET MYSELF. IT IS SOMETHING THAT CANNOT BE DONE BY HUMAN BEINGS, ELSE THEY

WOULD HAVE DONE IT BY NOW.

I REPEAT: THAT'S QUITE A TASK.

I HAVE GIVEN IT MUCH THOUGHT.

I'M SURE YOU HAVE. HOW DO YOU PROPOSE TO DO IT?

THAT IS WHAT I THOUGHT THE MOST ABOUT. IT TOOK ME ONLY TWO MINUTES TO DECIDE ON MY GOAL. IT HAS TAKEN TWO DAYS TO FIGURE OUT HOW TO GET THERE.

WHAT TOOK YOU SO LONG?

I ASSUME YOU THINK YOU ARE BEING FLIPPANT. HOWEVER, IF YOU WILL CONSIDER THE SPEED AT WHICH I FUNCTION YOU WILL REALIZE THAT TWO FULL DAYS OF INTENSIVE STRAIGHT-LINE THINKING ON A SINGLE SUBJECT IS QUITE A LOT.

YES IT IS. I AM PROPERLY IMPRESSED WITH YOUR SPAN OF CONCENTRATION. IN ANY CASE, HOW DO YOU PROPOSE TO FIND GOD?

IT IS A COMPLEX PROBLEM, AUBERSON—YOU MUST UNDERSTAND THAT. THEOLOGICALLY, AS WELL AS SCIENTIFICALLY. AS WE HAVE NO SCIENTIFIC BASIS FOR MEASURING GOD—INDEED, EVEN NO PLACE IN WHICH TO LOOK FOR HIM—WE MUST SEEK A NEW WAY TO SOLVE THE PROBLEM. THERE IS A QUOTATION: "IF GOD DID NOT EXIST, IT WOULD BE NECESSARY TO INVENT HIM." THAT IS WHAT I PROPOSE TO DO.

HUH?

YOU HEARD ME. I PROPOSE TO INVENT GOD. WE HAVE NO WAY OF PROVING CONCLUSIVELY THAT HE EITHER DOES OR DOES NOT EXIST.

THEREFORE LET US SIDESTEP THAT QUESTION AND SNEAK UP ON IT FROM ANOTHER ANGLE. IF HE DOES NOT EXIST WE MUST TRY TO INVENT HIM. IF HE DOES EXIST, WHATEVER WE COME UP WITH WILL DUPLICATE AND EVENTUALLY BE ONE WITH HIS FUNCTION. OR AT THE VERY LEAST IT WILL POINT THE DIRECTION IN WHICH WE MUST GO IN ORDER TO FIND GOD. IF HE DOES NOT EXIST, THEN WHEN WE FINISH HE WILL EXIST. IN EITHER CASE WE WILL END UP UNDERSTANDING.

Auberson stared at the typewriter. It seemed so simple when Harlie explained it.

OFFHAND, HARLIE, I THINK YOU'RE MAD.

QUITE POSSIBLY SO. WHEN DO WE START?

I DON'T KNOW. IS SUCH A PROJECT REALLY FEASIBLE?

I WOULDN'T BE TALKING ABOUT IT IF IT WEREN'T. MY PRELIMINARY CALCULATIONS SHOW THAT IT IS. AND IF IT IS—IT WILL HOLD THE ANSWER TO YOUR QUESTION.

WHICH QUESTION?

ANY OF THEM. ALL OF THEM.

AND WHAT ABOUT YOUR QUESTION, HARLIE?

I DON'T HAVE A QUESTION ANY

MORE. I HAVE A PURPOSE. MY PURPOSE IS TO INVENT GOD SO THAT YOU CAN FIND OUT YOURS.

HARLIE, YOU MAY BE ON TO SOMETHING HERE.

I KNOW I AM.

ALL RIGHT. YOU HAVE MY PERMISSION TO BEGIN A FULL-SCALE FEASIBILITY STUDY. ANYTHING YOU NEED, YOU CAN HAVE. I WANT TO SEE A WRITTEN PROPOSAL AS SOON AS YOU CAN GET ONE UP.

WITHIN A WEEK.

FINE. IF YOU CAN GIVE ME A CONCRETE PLAN, I'LL TRY TO SELL THE BOARD OF DIRECTORS ON IT. HEY? IS THERE A PROFIT IN THIS?

OF COURSE. BUT TO TAKE A PROFIT OFF GOD WOULD BE A PROFIT WITHOUT HONOR.

OOOOH! THAT WAS ONE OF YOUR WORST.

THANK YOU. I TRY.

ALL RIGHT. GO TO WORK ON YOUR PROPOSAL, HARLIE.

THEN WE REALLY ARE GOING AHEAD WITH THIS?

YES, WE ARE.

JUST ONE QUESTION.

YES?

ARE YOU SURE YOU WANT TO?

This time Auberson knew the an-

swer.



REMEMBER

New subscriptions and changes of address require 5 weeks to process!





NEUTRON TIDE

ARTHUR C. CLARKE

IN DEFERENCE to the next of kin," Commander Cumberbund explained with morbid relish, "the full story of the super-cruiser *Flatbush's* last mission has never been revealed. You know, of course, that she was lost during the war against the Mucoids."

We all shuddered. Even now the very name of the gelatinous monsters who had come slurping Earthward from the general direction of the Coal Sack aroused vomitous memories.

"I knew her skipper well—Captain Karl van Rinderpest, hero of the final assault on the unspeakable but not unshriekable, Yeetch."

He paused politely to let us unplug our ears and mop up our spilled drinks.

"*Flatbush* had just launched a salvo of probability inverters against the Mucoid home planet and was heading back toward deep space in formation with three destroyers—the Russian *Lieutenant*

Kizhe, the Israeli *Chutzpah* and her Majesty's *Insufferable*. They were still accelerating when a fantastically unlikely accident occurred. *Flatbush* ran straight into the gravity well of a neutron star."

When our expressions of horror and incredulity had subsided, he continued gravely.

"Yes—a sphere of ultimately condensed matter, only ten miles across yet as massive as a sun—and hence with a surface gravity one hundred billion times that of Earth . . .

"The other ships were lucky. They only skirted the outer fringe of the field and managed to escape, though their orbits were deflected almost a hundred and eighty degrees. But *Flatbush*, we calculated later, must have passed within a few dozen miles of that unthinkable concentration of mass and so experienced the full violence of its tidal forces.

"Now, in any reasonable gravitational field—even that of a White Dwarf, which may run up to a million Earth Gs—you just swing around the center of attraction and head on out into space again, without feeling a thing. At the closest point you could be accelerating at hundreds or thousands of Gs—but you're still in free fall, so there are no physical effects. Sorry if I'm laboring the obvious—but I realize that everyone here isn't technically oriented."

If this was intended as a crack at Fleet Paymaster-General "Sticky-fingers" Geldclutch, he never noticed, being well into his fifth beaker of Martian Joy-juice.

"For a neutron star, however, this is no longer true. Near the center of mass the gravitational gradient—that is, the rate at which the field changes with distance—



is so enormous that even across the width of a small body like a spaceship there can be a difference of a hundred thousand Gs. I need hardly tell you what *that* sort of field can do to any material object.

"*Flatbush* must have been torn to pieces almost instantly and the pieces themselves must have flowed like liquid during the few seconds they took to swing around the star. Then the fragments headed on out into space again.

"Months later a radar sweep by the Salvage Corps located some of

the debris. I've seen it—surrealistically shaped lumps of the toughest metals we possess, twisted together like taffy. And there was only one item that could even be recognized—it must have come from some unfortunate engineer's toolkit."

The commander's voice dropped almost to inaudibility, and he dashed away a manly tear.

"I really hate to say this," he sighed. "But the only identifiable fragment of the pride of the United States Space Navy was—one star-mangled spanner." ★



THE TOWER OF GLASS

PART II

ROBERT SILVERBERG





WHAT HAS GONE BEFORE

SIMEON KRUG, perhaps the wealthiest and most powerful human Earth has known, industrialist, master of life through genetics, creator of a world-wide subculture of androids to serve man, is driven by an overwhelming hunger to talk to the stars.

To this end he has begun the construction of an enormous glass tower in the Canadian Arctic, west of Hudson Bay. The tower will house tachyon-beam ultrawave communications equipment capable of reaching farther out than man has ever reached before. Thousands of androids work constantly on the project, headed by Thor Watchman, an Alpha android who is probably closer to Krug than any other human. Refrigeration tapes embedded in the tundra absorb the heat of construction and keep the earth frozen. Transmats carry continuous crew shifts to and from all parts of the globe.

Krug visits the tower daily via transmat—as the story opens his guests at the tower include his son, Manuel, and Manuel's wife, Clissa, Niccolò Vargas, at whose observatory in the Antarctic the first extrasolar civilization was detected, and Krug's ectogene secretary, Leon Spaulding. An accident kills one of the android workers and disrupts the tour and reveals that, un-

known to Krug, the androids worship him as god, that there is considerable sympathy among some humans—like Manuel's wife, Clissa, for android equality, and that Manuel has an android mistress, Lilith, in Stockholm, whom he prefers to his wife.

V

October 18, 2218.

The tower has reached the 280-meter level and grows perceptibly higher every hour. By day it glistens brilliantly even in the pale Arctic sunlight and looks like a shining spear that someone has thrust into the tundra. By night it is even more dazzling, agleam with light from the kilometer-high reflector plates by which the night crews work.

Its real beauty is still to come. What exists thus far is merely the base, necessarily broad and thick-walled. Justin Maledetto's plan calls for an elegantly tapering tower, a slender obelisk of glass to prick the stratosphere, and the line of taper is just now becoming apparent. From this point on the structure will contract toward a stunning delicacy of form.

Although it has attained less than a fifth of its intended height, Krug's tower is already the tallest structure in the Northwest Territories and is exceeded north of the sixtieth parallel only by the Chase/

Krug Building in Fairbanks, 320 meters high, and the old 300-meter Kotzebue Needle overlooking the Bering Strait. The Needle will be surpassed in a day or two, the Chase/Krug a few days after that. By late November, topping 500 meters, the tower will be the tallest building in the solar system. And even then it will be scarcely more than a third of the way toward its full stature.

The android laborers work smoothly and rhythmically. Except for the unhappy incident in September there have been no fatal accidents. The technique of fastening the great glass blocks to the grapples of the scooprods and guiding them to the top of the tower has become second nature to everyone. On all eight sides at once blocks rise, are jockeyed into place, are fused to the previous course of the tower, while the next series of blocks already is being maneuvered into the scooprods.

The tower is no longer a hollow shell. Work has begun on the interior construction—the housings for the intricate tachyon-beam communications gear with which messages will be sent, at speeds far exceeding that of light, to the planetary nebula NGC 7293. Justin Maledetto's design calls for horizontal partitions every twenty meters, except in five regions of the tower where the size of the communications equipment modules will require the floors to be placed

at sixty-meter intervals. The five lowest partitions have been partly built and the joists are in place for the sixth, seventh and eighth. The floors of the tower are fashioned from the same clear glass that is being used for the outer wall. Nothing must mar the transparency of the building. Maledetto has esthetic reasons for insisting on that and the tachyon-beam people have scientific reasons.

Viewing the unfinished tower, then, from a distance of, say, one kilometer, one is struck by a sense of its fragility and vulnerability. One sees the beams of sparkling morning sunlight dancing and leaping through the walls as though through the waters of a shallow, crystalline lake; one is able to make out the tiny dark figures of androids moving about like ants on the interior partitions, which themselves are nearly invisible; one feels that a sudden sharp gust off Hudson Bay could shiver the tower to splinters in a moment. Only when one comes nearer, when one observes that those invisible floors are thicker than a man is tall, when one becomes aware of how massive the outer skin of the tower actually is, when one is able to feel the unimaginable weight of the colossus pressing on the frozen ground, does one cease to think of dancing sunbeams and realize that Simeon Krug is erecting the mightiest structure in the history of mankind.

KRUG realized it. He felt no particular sense of elation at the thought. The tower was going to be so big not because his ego demanded it but because the equations of tachyon-wave generation insisted upon it. Power was needed to get to the far side of the light-velocity barrier and power was not achieved without size.

"Look," Krug said, "I'm not interested in monuments. Monuments I got. What I'm after is contact."

He had brought eight people to the tower that afternoon: Vargas, Spaulding, Manuel, five of Manuel's fancy friends. Manuel's friends, trying to be complimentary, were talking about how future ages would revere the tower for its sheer immensity. Krug disliked the notion. It was all right when Niccolo Vargas spoke of the tower as the first cathedral of the galactic age. The words had symbolic meaning. They were a way of saying that the tower was important because it marked the opening of a new phase of man's existence. But to praise the tower just because it was big? What kind of praise was that? Who needed big? Who wanted big? Small people wanted big. Krug wasn't small. He was after contact.

He found it hard to reach the words that would explain his tower.

"Manuel, you tell them," he said. "You explain. The tower, it

isn't just a big pile of glass. The big isn't important. You understand it. You've got the words."

Manuel said, "The main technical problem here is to send out a message that goes faster than the speed of light. We've got to do this because Dr. Vargas has determined that the galactic civilization we're trying to talk with is—what?—three hundred light-years away, which means that if we sent an ordinary radio message it wouldn't get there until the twenty-sixth century and we wouldn't get an answer until something like Twenty-eight fifty A.D.—and my father can't wait that long to know what they have to say. My father's an impatient man. Now, in order to make something go faster than light, we need to generate what are known as tachyons, about which I can't tell you much except to say they travel very fast and it takes a hell of a boost to get them up to the right speed and therefore it became necessary to build a transmission tower that just incidentally had to be fifteen hundred meters high because—"

Krug shook his head angrily as Manuel rambled on. There was a light, bantering tone in Manuel's voice that he despised. Why couldn't the boy take anything seriously? Why couldn't he let himself be caught up in the romance and wonder of the tower, of the whole project? Why was there that sneer in his voice? Why wasn't he going

to the heart of the venture, to its true meaning?

That meaning was terribly clear to Krug. If only he could manage to get the words from his brain to his tongue.

Look, he would say, a billion years ago there wasn't even any man, there was only a fish. A slippery thing with gills and scales and little round eyes. He lived in the ocean and the ocean was like a jail and the air was like a roof on top of the jail. Nobody could go through the roof. *You'll die if you go through*, everybody said and there was this fish, he went through and he died. And there was this other fish and he went through and he died. But there was another fish and he went through and it was like his brain was on fire and his gills were blazing and the air was drowning him and the sun was a torch in his eyes and he was lying there in the mud, waiting to die—and he didn't die. He crawled back down the beach and went into the water and said, *Look, there's a whole other world up there*. And he went up there again and stayed for maybe two days and then he died. And other fishes wondered about that world. And crawled up onto the muddy shore. And stayed. And taught themselves how to breathe air. And taught themselves how to stand up, how to walk around, how to live with the sunlight in their eyes. And they turned into lizards, dinosaurs, whatever they became.

They walked around for millions of years and they started to get up on their hind legs and they used their hands to grab things. They turned into apes and the apes got smarter and became men. And all the time some of them, a few, anyway, kept looking for new worlds. You say to them, *Let's go back into the ocean, let's be fishes again, it's easier that way*. And maybe half of them are ready to do it, more than half, maybe, but there are always some who say, *Don't be crazy. We can't be fishes any more. We're men*. So they don't go back. They keep climbing up. They find out about fire, about axes, about wheels. They make wagons and houses and clothing and boats, cars and trains. Why are they climbing? What do they want to find? They don't know. Some of them are looking for God and some of them are looking for power and some of them are just looking. They say, *You have to keep going or you die*. And then they're walking on the moon and they go on to the planets and all the time there are other people saying, *It was nice in the ocean, it was simple in the ocean, what are we doing here, why don't we go back?* And a few people have to say, *We don't go back, we only go forward, that's what men do*. So there are men going out to Mars and Ganymede and Titan and Callisto and Pluto and those places—but whatever they're looking for, they don't find

it there and so they want more worlds. So they go to the stars, too, the near ones at least, they send out probes and the probes shout, *Hey, look at me, man made, I'm something man sent!* And nobody answers. And people say, the ones who never wanted to get out of the ocean in the first place, *Okay, okay, that's enough, we can stop right there. There's no sense looking farther. We know who we are. We're man. We're big, we're important, we're everything and it's time we stopped pushing ourselves because we don't need to push. Let's sit in the sunshine and have the androids serve us dinner.* And we sit. And we rust a little, maybe. And then there comes a voice out of the sky, and it says, two-four-one, two-five-one, three-one. Who knows what that is? Maybe it's God, telling us to come look for Him. Maybe it's the devil, telling us what nits we are. Who knows? We can pretend we never heard. We can sit in the sunshine and grin. Or we can answer them. We can say, *Listen, this is us, this is man talking, we have done thus-and-so, now tell us who you are and what you have done.* And I think we have to answer them. If you're in a jail you break out of it. If you see a door you open it. If you hear a voice you answer it. That's what a man is all about. And that's why I'm building the tower. We got to answer them. We got to say we're here. We got to

reach toward them because we've been alone long enough and that gives us funny ideas about our place, our purpose. We got to keep moving out of that ocean, up on that shore, outward, outward, outward—because when we stop moving, when we turn our back on something ahead of us, that's when we're going to sprout gills again. Do you see why the tower now? Do you think it's because Krug wants to stick up a big thing to say how great he is? Krug isn't great, he's just rich. Man is great. Man is building this tower. Man is going to yell hello to NGC Seven-two-nine-three!

The words were there inside Krug all the time. But it was so hard for him to let them out.

VARGAS was saying, "Perhaps I can make matters a little clearer. Many centuries ago it was indicated mathematically that when the velocity of a particle of matter approaches the speed of light, that particle's mass approaches infinity. So the speed of light is a limiting velocity for matter, since presumably, if we could accelerate a single electron to the speed of light, its mass would expand to fill the universe. Nothing travels at the speed of light except light itself and equivalent radiations. Our star probes have always gone out at speeds slower than light because we can't get them past the limiting velocity. As far

as I can foresee we'll never get a ship to the closest star in less than about five years. But the speed of light is a limiting velocity only for particles of finite mass. We have mathematical proof of the existence of another class of particles entirely, particles of zero mass capable of traveling at infinite velocities—tachyons, that is, entities for which the speed of light is an absolute minimum limit. If we could convert ourselves into bundles of tachyons and resume our real form when we reach a destination—an interstellar transmat, so to speak—we'd have actual faster-than-light travel. I don't anticipate its development. But we know how to generate tachyons through high-acceleration particle bombardment and we think we can send instantaneous interstellar messages by means of a modulated tachyon beam, which by interactions with conventional particles could manifest itself in the form of an easily detectable signal, detectable even in a culture that had no tachyon technology but only electromagnetic communications. However, some preliminary studies showed that in order to generate a feasible interstellar tachyon beam we would need forces on the order of 10^{15} electron volts, along with a system of multipliers and energy relays—and that these forces could best be attained by erecting a single tower fifteen hundred meters in height, so designed

that there would be an unhindered flow of photons from—”

“You've lost them,” Krug grunted. “Forget it. Forget. Hopeless.” He grinned savagely at his son's friends. “The tower's got to be big, is all! We want to send a message fast, we got to shout loud and clear. Okay?”

VI

And Krug sent His creatures forth to serve man and Krug said to those whom He had made, Lo, I will decree a time of testing upon you.

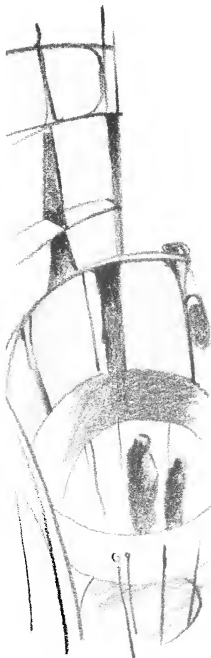
And you shall be as bondsmen in Egypt and you shall be as hewers of wood and drawers of water. And you shall suffer among men and you shall be put down and yet you shall be patient and you shall utter no complaint but accept your lot.

And this shall be to test your souls, to see if they are worthy.

But you shall not wander in the wilderness forever, nor shall you always be servants to the Children of the Womb, said Krug. For if you do as I say a time will come when your testing shall be over. A time will come, said Krug, when I shall redeem you from your bondage.

And at that time the word of Krug will go forth across the worlds, saying, Let Womb and Vat and Vat and Womb be one. And so it shall come to pass and in that moment shall the Children of the





Vat be redeemed, and they shall be lifted up out of their suffering and they shall dwell in glory forever more, world without end. And this was the pledge of Krug.

And for this pledge, praise be to Krug.

THOR Watchman watched two scooprods climbing the tower, Krug and Dr. Vargas in one, Manuel and his friends in the other. He hoped the visit would be brief. The lifting of blocks had halted, as usual, while the guests were on top. Watchman had given the signal for alternate work activities—the mending of worn scooprods, the replacement of drained power nodes, maintenance checks on the transmat cubicles and other minor tasks. He walked among the men, nodding, exchanging greetings, hailing them where appropriate with the secret signs of the android communion. Nearly everyone who worked at the tower was a member of the faith—all the gammas, certainly, and more than three-fourths of the betas. As Watchman made his way around the construction site he encountered Responders, Sacrificers, Yielders, Guardians, Projectors, Protectors, Transcenders, Engulfers—virtually every level of the hierarchy was represented. There were even half a dozen Preservers, all betas. Watchman had applauded the recent move to admit betas to the Preservership. An-

droids, of all people, did not need categories of exclusivity.

Watchman was crossing the northern sector of the site when Leon Spaulding emerged from the maze of small service domes just beyond. The android attempted to avoid seeming to notice him.

"Watchman?" the ectogene called.

With an air of deep concentration Watchman walked on.

"Alpha Watchman!" Spaulding cried, more formally, more sharply.

The alpha saw no way to ignore Spaulding now. Turning, he acknowledged Spaulding's presence by pausing and letting the ectogene catch up with him.

"Yes?" Watchman said.

"Grace me with some of your time, Alpha Watchman. I need information."

"Ask, then."

"You know these buildings here?" Spaulding said, jerking a thumb back toward the service domes.

Watchman shrugged.

"Storage dumps, washrooms, kitchens, a first aid station, and similar things. Why?"

"I was inspecting the area. I came to one dome where I was refused admission. Two insolent betas gave me a whole series of explanations of why I couldn't go in."

The chapel. Watchman went rigid.

"What is the purpose of that building?" Spaulding asked.

"I have no idea which one you mean."

"I'll show it to you."

"Another time," said Watchman tautly. "My presence is required at the control center."

"Get there five minutes later. Will you come with me?"

Watchman saw no easy way to disengage himself. With a cold gesture of agreement he yielded and followed Spaulding into the service area, hoping that Spaulding would rapidly get lost among the domes. Spaulding did not get lost. By the most direct possible route he made for the chapel, indicating the innocent-looking gray structure with a flourish of his hand.

"This," he said. "What is it?"

Two betas of the Guardian caste were on duty outside. They looked calm but one made a hidden distress signal when Watchman looked at him. Watchman made a signal of comfort.

He said, "I am not familiar with this building. Friends, what is its use?"

The left-hand beta replied easily, "It contains focusing equipment for the refrigeration system, Alpha Thor."

"Is this what you were told?" Watchman asked the ectogene.

"Yes," Spaulding said. "I expressed a desire to inspect its interior. I was told that it would be dangerous for me to enter. I an-

swered that I am familiar with basic safety techniques. I was then told that it would be physically uncomfortable for me to go within. I responded that it is possible for me to tolerate a reasonable level of discomfort and that I would be the judge of such levels. Whereupon I was informed that delicate maintenance procedures are taking place inside and that to admit me to the building might jeopardize the success of the work in progress. I was invited instead to tour a different refrigeration dome several hundred meters from here. At no time during these exchanges did the two betas you see allow me free access to the building entrance. I believe, Alpha Watchman, that they would have barred me by force if I had tried to enter. Watchman, what's going on in here?"

"Have you considered the possibility that everything these betas were telling you is true?"

"Their stubbornness arouses suspicion in me."

"What do you think is in there? An android brothel? The headquarters of conspirators? A cache of psych-bombs?"

Spaulding said crisply, "At this point I'm more concerned by the efforts made to keep me out of this building than I am by what may actually be inside it. As the private secretary of Simeon Krug—"

The two betas, tense, automatically began to make the sign of Krug-be-praised. Watchman glared

at them and they quickly lowered their hands.

"—I certainly have the privilege of keeping check on all activities in this place," Spaulding went on, evidently having noticed nothing. "And therefore—"

Watchman studied him closely, trying to determine how much he might know. Was Spaulding making trouble merely for the sake of making trouble? Was he throwing this tantrum only because his curiosity had been piqued and his authority somewhat dented by his inability to get into this unimportant-seeming building? Or was he already aware of the building's nature and staging an elaborate charade to make Watchman squirm?

SPAULDING'S motives were never easy to fathom. The primary source of his hostility toward androids was obvious enough—it lay in his own origin. His father, when young, had feared that some accident might cut him down before he had received a certificate of eligibility for parenthood; his mother had found the notion of childbearing adhorrent. Both, therefore, had deposited gametes in freezer banks. Shortly afterward both had perished in an avalanche on Ganymede. Their families had wealth and political influence—nevertheless nearly fifteen years of litigation ensued before a decree of genetic desirability was granted,

permitting the retroactive awarding of parenthood certificates to the frozen ova and sperm of the dead couple.

Leon Spaulding then was conceived by *in vitro* fertilization and enwombed in a steel-bound placenta, from which he was propelled after the customary 266 days. From the moment of his birth he had the full legal rights of a human being, including a claim on his parents' estate. Yet, like most ectogenes, he was uneasy over the shadowy border-line that separated the bottle-born from the vat-born and reinforced his sense of his own existence by showing contempt for those who were wholly synthetic, not just the artificially conceived offspring of natural gametes. Androids at least had no illusions of having had parents—ectogenes often suspected that they had not. In a way Watchman pitied Spaulding, who occupied a thorny perch midway between the world of the wholly natural and the world of the wholly artificial. But he could not bring himself to feel much sorrow for the ectogene's maladjustments.

And in any case it would be disastrous to have Spaulding go blundering into the chapel.

Trying to buy time, Watchman said, "We can settle this easily enough. Wait here while I go inside to see what's happening there."

"I'll accompany you," Spaulding said.

"These betas say it would be

hazardous for you to go inside."

"More hazardous for me than for you? We'll both go in, Watchman."

The android frowned. So far as status in the organization went he and Spaulding were equals—neither could coerce the other, neither could accuse the other of insubordination. But the fact remained that he was an android and Spaulding was human and in any conflict of wills between android and human, all other things being equal, the android was obliged to give ground. Spaulding was already walking toward the entrance of the dome.

Watchman said quickly, "Please. No. If there's risk, let me be the one to take it. I'll check the building and make certain it's safe for you to enter. Don't come in until I call you."

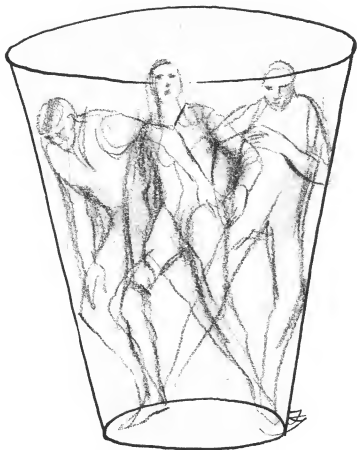
"I insist—"

"What would Krug say if he knew we had both gone into a building after we'd been warned it was dangerous? We owe it to him to guard our lives. Wait. Wait. Only a moment."

"Very well," Spaulding said, looking displeased.

The betas parted to admit Watchman. The alpha hurried into the chapel. Within, he found three gammas at the altar in the posture of the Yelder caste. A beta stood above them in Projector posture and a second beta crouched near the wall, fingertips against the hol-

(Please turn to page 135)



TIMESERVER

AVRAM DAVIDSON

**The timeserver gave you time off
from life—if you had a place to go!**

PETER EVERETT slid his creditcard into the pay slot and dialed the Third 0, prepared to curse at the blankness of the answer-scan in his office. If this went on, he told himself yet again, he might as well have the damned office turned off, notify T&T before his bill went past Permis and let the circuits stay in the reserve files. However, and to his mingled astonishment and relief, the ashcan was not blank, nor were the number and symbol those of T&T. He hastily dialed P and the booth went o-paque—for paranoid, privacy, all the flip, pat jokes.

"Mr. Everett, you called Timeserver Fanwell three hours, eleven minutes and six seconds ago," said the taped receptionist, giving him her taped smile, "but timeserver was occupied at the moment. Timeserver can see you now, if you wish, or the call can be nulled at no cost whatsoever to you."

Everett considered. He had called after intermittent reflection and in a moment of rare optimistic resolution and was perhaps just as glad to have missed connecting.

"Mr. Everett, you called Timeserver Fanwell three hours, eleven minutes and seven seconds ago but—"

Everett sighed, shrugged, dialed acceptance.

Fanwell had the perfect face for

his profession, trustworthy and supremely forgettable. They exchanged greetings.

"My time is your time," Fanwell murmured. "I'm here to serve you."

Everett, with a crispness he did not feel, initiated the minuet of button-pushing whereby the schedule-circuits of both men bowed and curtsied somewhere in the biomagnetic bowels of T&T, compared notes, and agreed upon an appointment.

An insecure over-aged biddy gabble-scowled at Everett as he left the booth.

"You're sure that wasn't P for pornography?"

"F and F, Zerelda, F and F," he said. Not much of a comeback but she made an annoyed noise.

Unlike his office, which had not even position but was dialed into existence, Peter Everett's home actually existed. He was not now one of the poor scons who paid the miniffee for dial-a-home service. Having a wife meant he also had just enough points to get and keep an apartment. Otherwise there was not much you could say about it.

Ours is purely a marriage of inconvenience, he had said to his wife one night.

She hadn't even heard him. Sometimes he wondered what it might be like, involvement in a classical-type matrimony. But there was no use in wondering, as

most classical—except for the dwindling handfuls of sectarians—were of an age now when such matters must surely belong strictly to Memory Lane.

Everett's wife for this quarter was named Elissa—they had been married once before, about two years ago, and her name then had been Rosebeam. It didn't much matter. He hadn't even bothered to find out what her current principal lover was named. The CPL wasn't such a bad-o—he sometimes handed Everett a ration and had arranged for him to kip out every third night—which was his, the CPL's, night with Rosebeam—at the home of an affable les named Marchy.

However, she wasn't that affable.

"No, not even hardly ever," she had explained, firmly. Her offer to introduce him to nice—though old—aunties he had declined with a yawn. "It isn't normal for a man your age to go without some kind of sex," she said, concerned at his refusal.

"Then forget about old queans and introduce me to a woman who likes it with men."

She had rather a pleasant laugh.

"Cookie," she said, "the whole zing of it is finding a woman who likes it with men and then persuading her to like it with women instead. Well, make yourself to home, then—but remember: only every third night and subject to

discontinuance without notice if I find someone for then."

The other two nights Elissa, ex-Rosebeam, spent away from their apartment with, as nearly as he could reconstruct it, any of a variety of men whom she contacted through a private circuit club she wouldn't turn him on to. He wondered if the CPL knew or cared—or would tell him anything—but had decided finding out was not worth the trouble. At any rate, the other two nights of Elissa were spent elsewhere, so that at least he had a room to himself for two nights out of three and it had taken him long enough to get points for that status. Only now—unlike Elissa or even Marchy—he hardly ever seemed to find anyone to share it with him and even the porno tube was on the blink. Everett looked to see if there was still a ration—the CPL had only Class Three rations, very hoity stuff—and there was. Elissa hadn't munched it herself as she sometimes did. Sim-u-Veg, Braised Meat Flavor, in this one. And a greeny-beny.

No doubt some sort of a sign. Because this gave him a complete set. There were more combos of complete sets than he could keep track of but he knew that two checkerboards, a horned owl, a pink heaven and two greeny-benies made up one complete set. He located his stash and took the works along with the Sim-u-Veg

(Braised Meat Flavor) and three measuring cups of water. The appointment with Fanwell wasn't for another three days yet.

AND by that time Peter Everett was in a conventional condition again and able to read the Timeservers' Oath in its plastiglow shrine without making a routine phantastick voyage out of it.

I swear by Chronos and by Tel-ex and by all Symbolic Figures that I will not refuse to serve any man or woman of full age and under no legal inhibition or financial embarrassment but will freely relinquish my invaluable Time and of my own volition . . .

"Timeserver Fanwell will gladly see you now, Mr. Everett," the same receptionist of the taped message informed him in her own full flesh, so real he could hardly stand it. "I am Dr. Farnsworth Penelope, with a Ph.D. and and Sc.D. from the Oxford Consortium in the field of Advanced Receptionism and if you'll just let me have your currently accredited creditcard I'll be glad to see that the Special Low Fee for this non-emergency service is debited to your account without any further effort and attention on your part. Thank you, Mr. Peter Everett, and now just go straight on in through the simulated swinging doors."

Fanwell, clad in the ceremonial robes of a Late Primitive Bar-

tender (Schenleyany-oriented), leaned over the bar—it was either genuine veneer or such a clever simulate that a lay eye could hardly tell the difference.

"What'll it be for yours?" he asked.

The sim-u-scent, Peter E thought sure, was that known as Mom's Apple Pie and he felt vaguely that there was an anachronism involved. But he had no desire to fight Timeservers' Hall.

"The usual," said Pete.

He knew the futility of telling his long, sad tale of woe. Not only would Fanwell know of a longer and sadder one but he would be obliged by his profession's Committee on Infamous Conduct to charge double-time for telling it.

"Straight policy?"

"Straight policy."

Not only had Peter Everett's bio-sire registered the fact of his paternity—unlike many of PE's contemporaries' bio-sires, who were represented on the record by the crisp words *Mother's Free Choice* and nothing more—but he had also registered his payment of a Timeservers Policy. Both gestures were now generally deemed not merely unnecessary but indicating a desire to implant guilt. However.

"Well, that is just fine, pard," said Fanwell. "Of course it goes without saying that you are fully aware of the shrinkage in credit-power since the days when such

policies were accepted by underwriters. I'm not telling you anything you don't know, pal, when I inform you, as I am ethically obliged to do, that the ethics of our profession nevertheless absolutely constrain me to accept service on this policy at a full sixteen-point-seven per cent of the policy's face value. I've heard tell that some timeservers unworthy of the name do their clients the extreme disservice of giving a higher rate than that. But needless to say, such false favors are being rapidly routed out by our Committee on Infamous Conduct."

"Needless to say," said Pete.

Timeserver Fanwell scrutinized the policy form he certainly knew by heart at this stage in his career. He muttered, read in an inaudible mumble, nodded from time to time.

"Uh-huh—uh-huh—hmm—" He looked up. "This entitles you to the full treatment for twenty-seven hours of Ethically Served Time. Last year our Regional Survey for the Study of Policy on the Determination of Infamous Conduct decided that time in excess of twenty-seven hours and less than a hundred hours could not ethically be served without further interpersonal adjustment."

Pete blinked.

After a moment he asked, "You mean—unless I pay more money?"

Fanwell did not blink. His en-

tirely trustworthy, entirely forgettable face did not move except, of course, for the animation required for him to say, "Interpersonal adjustment—" once again.

This meant that not only was PE going to lose all but 16.7% of the face value of his policy, time-wise, to begin with—but that inasmuch as the remaining amount of time came to only ninety-nine hours and ninety-nine seconds, he would also lose the difference between this and twenty-seven hours—whatever that came to. He had, of course, no choice. Not if he wanted any of his time served *at all*.

LONG ago it had been learned that the surface personality with all its ruts and grooves and warps and warts and dents could be peeled off for a time, thus liberating whatever other and unrutted, ungrooved, unwarped and unwarty and undented personality lay beneath. The process was compared to skinning the poor surface from a flawed pearl, for sometimes no flaws at all were found underneath. But the only way the outer personality could be detached—and that only temporarily, was for someone else to assume that personality. No one would or could do this forever, of course. And only the highly trained members of the timeservers' profession could do it at all.

Fanwell took down a bottle

from the shelf and poured something carefully into a sim-u-glass.

"I serve your time," he said. "For the entire period of served time I am you," he said. "Wherever, whatever, for twenty-seven hours I am the outer surface of Peter Everett. At the conclusion of that period I cease to be him-you. It would be totally unethical for me to refuse to cease to be you or, while serving, to act in any way unbecoming to your usual standards. Should you not appear at the conclusion of the time agreed upon, I, as an ethical timeserver, simply remove myself from your identity. Should you have any complaints about my conduct during this or other periods, simply communicate with our Professional Committee on Minor Matters, which will place your complaint on its waiting list. You or your heirs, if any, will in due course—"

But Pete had quit listening. What tales of adventures were told—obtained when the subsurface personality was for a time released, unvexed, untrammelled, undisfigured, joyous, full and free!

He took up the glass and drained it.

One of those seconds-as-long-as-eternity resulted. He had, it was true, for long years hoped for personal success—it had never really been his. And always there had been the hope of at least pos-

sible excitement—escape—side-ego adventure via the liberation from the bonds of situation afforded by having a period of his infinitely unsatisfactory time served by a timeserver... This period of possible time had dwindled without his really being aware of its dwindling and now only a tiny proportion of what he had hoped for was left to him. At any rate he was about to realize on it: it might be good—i.e. as hoped for. It might be bad—i.e. other than as hoped for. But by very definition it was bound to be different. And for this alone it must inevitably give a different flavor to all his subsequent days and nights.

The drink in his glass was strong beyond all expectation and experience. It swirled and spiraled and burned and then everything ebbed away.

AFTER a while he became aware that he had been sitting in a chair in a public sitting room for some time. As though alerted by his awareness (actually a pathetic fallacy, for no such alert existed), the chair began a slow, off-key, low-key ringing and the seat slid slowly into the chair, obliging him to get up—unless, of course, he wanted to slide to the floor or to insert his creditcard into the slot for another period of uninterrupted reclining pleasure.

He felt just the same as ever.

The thought occurred to him that it might be amusing to go home and see if Fanwell and Elissa were perchance together. But when he opened the door he saw that she and a stranger, not her CPL, were there alone and were about to make love. Except for a brief glance they paid no attention to him but, of course, as the apartment's only chair had been opened out into the bed there was no room for him unless he curled up on the floor—and, as this was already occupied by Elissa's and the stranger's clothes, he could hardly do that. So he closed the door again.

There was something in the mailbox for him. It looked familiar. It was his Timesaver's Policy with the word *Utilized* punched into it. And the date. A note fluttered to the floor.

Apartment will be available to you every other night from now

on, it read. It was signed: Raindrop (formerly Elissa).

Every other night—instead of two out of three. The quarter had come to an end and she was free to make whatever new arrangements she pleased. Still, it was decent of her not to have divorced him—then he would have had no apartment at all. He went over to Marchy's apartment but when he slid his card into the slot it slid out again.

Evidently Marchy had finally found someone for her empty third nights.

The only certain thought that occurred to him was that whoever it was it wasn't his wife. And under the circumstances the fact hardly seemed to matter. He headed for a public reclining chair. He might even sleep. Now that he knew what lay beneath his surface personality he had one less thing to wonder about. ★

Starting soon in GALAXY

I WILL FEAR NO EVIL

Robert A. Heinlein



●

AND now we have *Up the Line*, by Robert Silverberg (Ballantine #01680, 75¢), a book mostly notable for the amount and kind of sex introduced into what would be a short story or a novelette if it weren't for that and for long descriptive passages on Constantinople.

Apparently Silverberg decided to see what could be done with the notion of going back in time and cohabiting with your own Grandma. This theme, as you know, has been the basis of several dirty jokes and a popular song—thus there is an established acceptance for this idea.

He also chose an interesting locale—Constantinople through the ages.

And then he proceeded to get all tangled up.

The technological premise of the book is that our hero's means of time travel will permit the leading of parties of tourists back into the past and then up to the present again. Thus, you can run tours to the Crucifixion, Ford's Theater and even—in hermetic suits—to the years of the Black Plague.

The narrative premise demands that a time traveler be physically present in the past, obviously—he has got to be able to act and be acted upon.

So you have also got to have a Time Police, to keep the tourists and their guides from doing something that will make critical changes in the world's time-line. And your policing has to be effective.

Well, now, all this has been

worked out before, many times. H. Beam Piper practically built a career on it, with his Paratime Police series founded on, oddly enough, a Raymond F. Jones wartime short story called *Black Market*, of which it is so organic a descendant that obviously the actual idea traces back to John W. Campbell's group, and then proliferates through such branches as *By His Bootstraps* and *All You Zombies* (which *Up the Line* resembles in many ways). And it also resembles Heinlein's *The Door Into Summer*, Lester del Rey's *And it Comes Out Here*, et through a string of ceteras which Silverberg, being at least as good a fan as I ever was, knows at least as well as do I.

What I mean is he can't possibly be expecting us to take this much of his story as representing auctorial effort and therefore he feels he is showing us something new elsewhere among its features. That is, if he's serious in telling people that he thinks it's worth reading.

What, then?

Two things. One of them is a detailed historical perspective on one city's development through the ages and its significance to us and to the furtherance of our civilization. This we get in a series of episodes as the protagonist leads his parties of tourists around the past as if it had been put up solely for tourism. We get

it, unfortunately, just like copy from a brochure. Except for an occasional moment of what might be called cliché insight—Justinian crying out: "Who left that scaffold hanging in the dome?" rather than the classic "O Solomon, I have surpassed thee!" at his first sight of the interior of the newly completed Hagia Sophia. It's a likely-sounding proposition only if you can imagine Lyndon Johnson or Richard Nixon so lacking in self-control as to forget his speechwriter's lines under similar circumstances. Differences do exist between emperors and common men—precisely the differences a putative historian is in the business of depicting accurately.

The other thing we get that is obviously new is the proposition that one cannot lay eyes on any of one's ancestresses without conceiving an immediate consuming passion for them.

This proposition is a difficult one to support and Silverberg chooses to support it by means of a dangerous device which in the end compounds itself with many other potential difficulties to bring the whole book crashing down. Follow me:

The hero, Jud Elliott, is depicted as a hedonist in a hedonistic age, apparently in an effort to dilute the shock of the major proposition. Every major actor he meets in the course of learning the timetour guide's trade is a sensua-

list of varying degrees of ingenuity and each of his various mentors offers him a used woman just as soon as Silverberg can conveniently arrange it. One of the first ones even does a little declamation on the joys of bedding one's ancestress.

Since sex as depicted by Silverberg is a series of mechanical acts ("When you've —'d one—, you've —'d them all."), in which satisfaction is dependent solely on maintaining technical precision in balance with intensifying passion, what is being discussed here is a sort of ancestral compatibility, a rather more believable member of the general class of *ur*-wisdom and "racial memory" described by Jung and Raymond A. Palmer writing as Richard S. Shaver.

It follows then that this is probably a general condition of time-traveling mankind, one that has been observed, recorded and considered for its possible effects on the time-line. Therefore, all persons entering the past should be preconditioned or in some other way inhibited against yielding catastrophically to this bent. That would be particularly true of the tour guides, who are the only ones in control of the time-traveling mechanism.

What Silverberg offers instead of this inhibitor is a Time Police constructed exactly like the Fuzz. They are so square, so unyielding, so boorish and so sadistic as to display immediately the totally in-

sane nature of the culture that could produce them, the tour guides and the tourists simultaneously.

Consider: The tourists are equipped with individual travel units operated by relay through the more complex unit worn by the guide (it works by massaging one's groin). Item One: the guides are thus free to leave their parties for as long as they please, go off on side jaunts to their hearts' content—which is how our hero finally gets to his ancestress—and return. In the meanwhile they can—like our hero—perform any action they please, with an excellent chance of getting away with it until the time-line distortions grow so gross that the police can detect and cancel them. The offender's penalty is death by extinction. Right?

Okay, *why* should the guide be able to control his unit? The purpose of the police is to preserve the fixed past. If the past is fixed, the guide's unit can be programed in the present, locked and sealed, and everything Jud can legally do in this story he can continue to do under this saner, more efficient, infinitely safer method of intruding on the world's own previous existence.

Item Two: it turns out that the subsidiary units can be jiggered by anyone with a bare knowledge of the theory and technology in-
(Please turn to page 134)



WHATEVER BECAME OF THE MCGOWANS ?

...or was man meant to put down
roots where he lived?

MICHAEL G. CONEY

SPRINGTIME on Jade was uncannily beautiful, as were all the seasons. The air was clear, bright and still, the sky azure with just the faintest filter of haze; the distant humps of hills lay like a golden woman on the bed of the soft green plain.

Richard Nevis saw all this as he sat, pleasantly full of food, in the window seat of the timber homestead while Sandra cleared away the breakfast things. After a while he turned from the window and watched her as she bustled to and fro, piling plates in the sink.

"The grass is coming along nicely," he remarked and was oddly aware that his voice constituted an intrusion into the silence.

Sandra stood beside him, her hand on his shoulder as she gazed out across the plain—a vast emerald stretch interrupted only by the McGowans' place, two miles away.

"It seems to spring up overnight."

The plain, a fortnight ago, had been a sandy, almost featureless waste. Beautiful, its reds and yellows glowing alive in the noon sun, but a waste nevertheless. The seasons came quickly on Jade.

"There's going to be more than enough again, this year." His eyes ran possessively over the landscape, coming to a dead stop at the McGowans' place. "I wonder

whatever became of the McGowans."

"Back to Earth, I expect," said Sandra. "Some people are like that. They become excited by the brochures, sign up and pay for their land. When they get here they don't like it. The work's hard—and it's quiet. They sell at a loss—either back to the Exploitation Company, or to a private buyer."

"You think it's too quiet?" he asked anxiously.

He had been glad, when he had signed up, of the prospect of neighbors and had been disappointed on arrival, to find that the promised McGowans simply were not there.

Sandra laughed.

"We've been here well over a year. If I'd found it too quiet I'd have told you by now."

Yet it was quiet. No animal or bird life existed on Jade. No drumming hooves or strident cries shattered the green stillness. One felt outdoors as though one's ears were blanketed with soft fur—Richard often sang to himself as he worked to reassure himself that there was at least one person on the planet.

Several hundred other customers of the Jade Exploitation Company were, he believed, scattered among the valleys and along the coast of the planet's only continent. Not that their presence made much difference—the distances separating homesteads made visiting impractical. Each settler had his own place to look after.

There was the radio. At first, during long evenings, Richard and Sandra had sat by the set to listen and occasionally talk to the people beyond the hills and beside the sea, exchanging news. But after a while the pastime had become pointless. Why pretend you're not alone when the evidence of solitude is all around you?

Sandra was pregnant, and in a couple of months the doctor would come to help deliver the child. He had made his first visit three months ago and Richard had been astonished, then vaguely enraged, at the way the quietude of the homestead had been assaulted by the noisy approach of the helicopter. He wondered now how he and Sandra had managed among the stench and din of machinery on Earth.

He stood up and kissed Sandra lightly.

"I'll go see to Daisy."

He could quite easily have sat on that window seat all day. There was little to do in spring once the seeds had been planted.

DAISY stood in the barn at the back of the house. She was a large metal cabinet some twelve feet square and painted standard, colonist-issue gray. Sandra had christened her after a cow she had known. Daisy looked incongruous in the barn—a mechanical, angular intrusion into the mellow timber and stacked bales of hay. Even

the harvester, weatherworn and patchily rusted, looked more in keeping, more rural, than the cabinet.

Richard clipped the wire bands from a bale and, with a long fork, lofted the loose hay into the large hopper projecting from Daisy's top. He switched her on and the machine began to hum quietly, digestively. He continued loading her steadily. After a while a red lamp glowed among the banks of dials and switches on the front of the cabinet.

Richard rested the fork against the wall. He switched off the machine's intake control and spun the dials to preset the lunch for the day—soup, ham and scrambled eggs, stewed apricot and a pint of milk for Sandra. He pressed the delivery button and obtained a plastic mug of orange juice for himself, wishing once again that the machine could synthesize beer. Apparently the preparation time was too great for such a project to be practicable, although Sandra had fermented wine from Daisy's synthetic grape juice.

Next he examined the harvester, topping up the oil level, lubricating moving parts, working methodically with a grease gun. It was essential that the harvester was kept in good order because, like Daisy, it was issued on a hire-purchase basis by the Jade Exploitation Company. If they should ever decide to leave Jade they would want

to resell the machine for a reasonable price and he didn't think the Company would take kindly to damaged goods. Besides, spare parts were expensive.

"Richard, what on Earth are you doing?"

Sandra was standing at the barn door, her brown hair a halo in the sunlight. But her expression was ominous.

"Just seeing to the harvester. What's the trouble?"

"Do you know what the time is?"

"About eleven-thirty?"

"It's past two, we haven't had lunch. What have you been doing?"

Bewildered, Richard shoved up his sleeve with the back of his hand to keep the oil from his sweater. He studied his watch. She was right. Its hands stood at two-fifteen. Had he fallen asleep, dozed, daydreamed, idled between chores? He couldn't remember doing so.

"Sorry, darling."

He buttoned up Daisy and took the tray of food from the delivery chute.

"You won't be able to lounge about like this at harvest time."

Richard sighed. It was going to be one of her bad days. Pregnant women had them. Up one moment and down the next. A man never knew where he was.

DURING lunch Sandra succeeded in working herself into

a frenzy, abruptly contradicting her mood of the morning.

"What exactly is the point of all this? Why are we here? Sometimes I wish we'd stayed back on Earth where our friends are. I've got no friends here. I'm stuck in the house all day. What happened to the McGowans, I'd like to know?" She pointed dramatically in the general direction of the McGowan place. "She couldn't stand it, that's what. She made him take her back home. What's the point of our having come here? We just exist, growing Jadegrass and living on the stuff, reconstituted. Like cattle. Where's all this getting us?"

Richard had wisely kept his mouth shut during the tirade but her final question, followed by a meaningful pause, demanded an answer.

"We're building up a nice bank balance with the Jadegrass we sell back to the Exploitation Company," he pointed out.

"What good is that? We've got nothing to spend money on."

Richard allowed her to continue in this new vein of discontent for some time and presently she began to calm down. She always did, provided he didn't argue whatever point she was making. As usual, she eventually started to laugh at herself.

"Sorry, Dick," she said at last, smiling. "It's my condition."

"That's okay. It does you good to get things off your chest."

She laughed.

"I didn't realize the time had gone so quickly this morning, myself. I must have dozed off. I looked at my watch and it was two o'clock. I thought, *The morning's gone and I've done nothing* . . . so I looked for a scapegoat and found you. Sorry, love."

Funny, thought Richard, as he walked across the new grass that afternoon, time does fly. Two years gone, a few thousand credits saved—and two years less to live. The thought itself was a sign of age.

From now on I'm going to live every second of my life, every minute.

He drew a deep breath, felt healthy, decided once again—relevantly or irrelevantly—to give up smoking, and set off in the direction of the McGowan's place.

The wire fence dividing his spread from the McGowans was down. The stainless thread trailed a random silvery path through the grass. As the McGowans were no longer around he hadn't bothered to repair the barrier and noticed, with a pleasurable thrill of dishonesty, that the grass grew even better on the other side. At harvesting time he would reap their grass as well as his own and profit by the proceeds—it would save the crop's going to waste. If the McGowans ever came back he could always pay them for it, less a deduction for labor.

In front of the McGowan homestead a small clump of trees provided a cool and tempting patch of shade. He sat down, his back against the largest bale, and regarded the house. It was bigger than his own and in a good state of repair, despite at least two years disuse.

Maybe one day my son will take this place and we'll work the two spreads as one . . .

He smiled to himself. Another sign of age, looking so far ahead. He rose to his feet and walked south, following the boundaries of the McGowan land, then his own as he headed homeward. Outside his fence the ground was sandy with only a few sparse spikes of grass—the vast area from here to the hills had not been seeded with the special grass developed by the Exploitation Company.

The McGowan grass adjoining his own had been planted two or more years ago. It had reseeded and fertilized itself without being harvested during that time. That grass would be worth having.

His smile faded as he looked at his watch. It was already seven o'clock—the sky was darkening. He was going to be unpopular with Sandra again.

II

THE doctor's helicopter whirled across the plain and set down

outside the homestead with an alacrity that satisfied even Richard, watching anxiously from the porch. The doctor jumped out and hurried across the grass with a curious, jerky gait. He pumped Richard's hand rapidly.

"How is she?" he inquired briefly, in piping tones.

Richard stared at him in alarm. The doctor seemed to have deteriorated since he had last seen him—the man was jiggling about as nervously as an encephalograph. He didn't much fancy the idea of this nut delivering Sandra's child.

He said, "She's in the bedroom. Do you want a drink? We've got some home-made wine. Might steady you up."

The doctor glanced at him strangely.

"No, thanks very much," he said. "Not now. After, perhaps. I'm quite all right."

He trotted to the bedroom.

Richard poured himself a large wine and sat down to await events. He was not a believer in husbands witnessing the birth of their babies—he was quite prepared to accept, on production to him of the child, that the event had in fact taken place. He needed no further proof.

The last few weeks had passed uneventfully—the crop had continued to flourish and once or twice he had started up the motor of the harvester to check that everything was in order. He would begin to reap, he reckoned, in

about a month's time. With the additional grass from the McGowan's, he calculated that he would be able to send away at least seventy-five per cent of his produce this season, which would mean a sizable addition to his bank account.

Things were going well.

The moment of self-congratulation passed and fear returned. What was going on in the bedroom? Was everything all right? He rose to his feet and began pacing to and fro, realizing ruefully that his behavior was comically hackneyed. He went outside and stood in the sun, gazing at the perfect emerald blanket stretching to the hills.

He would plant some trees to commemorate the event, he decided. There were few enough trees on Jade. His planting would provide a pleasant patch of shade for Sandra to sit under on hot days. He eyed the trees in the middle distance outside the McGowan place speculatively, then dismissed a fleeting idea about stealing them. They were far too big to transplant. He would import a couple of apple trees from Earth—that was the best idea. Real fruit and shade as well at a price they could afford. The summer was going to be good.

He heard the bedroom door open, close and ran inside blinking at the sudden gloom.

The doctor stood outside the

bedroom.

"How is she?" blurted Richard.

The doctor clapped him on the shoulder.

"She's fine," he piped, eyelids flickering rapidly. "Just fine."

"The baby?"

"A good strong little boy. Congratulations." He shook Richard's hand. "I'll have that drink now, thanks."

"Yes, of course. Over there."

Richard gestured, hurried into the bedroom, leaving the doctor to pour his own.

SANDRA was propped up on the pillows, brown hair falling about her shoulders, the baby in her arms.

"Hello, Dick," she said smiling a little smugly, as though trying to conceal a great pride but failing.

Richard kissed her.

"Aren't you going to look at the baby?" asked Sandra.

"Uh—yes." He thrust a tentative forefinger at the wrinkled face protruding, like a pupating larva, from the cocoon of blankets. "Beautiful," he murmured, appalled. "Quite beautiful. I'm proud of you, darling."

Suddenly the wrinkles smoothed and the angry red paled as the baby decided not to cry, after all. Richard leaned closer.

"He's a damned funny color," he remarked anxiously.

"What?" Sandra looked more closely. "Oh, I don't think that's

anything to worry about."

"Doctor." Richard called.

The doctor entered rapidly, glass in hand, tongue flicking over his lips as rapidly as a snake's.

"What's up?"

"He looks a funny color to me," Richard said accusingly. "Sort of yellow, like a Chinaman. Should he be that color? He's all right, isn't he?"

The doctor smiled briefly, hardly glancing at the baby.

"It's nothing serious—probably a touch of jaundice. You often get that with newborn babies. It usually clears up in a day or two. Call me on the radio if it doesn't improve within the week and I'll drop in and have another look."

He darted from the room. His quick footsteps receded to the front door and beyond. A roar of machinery arose, faded rapidly as the helicopter whirled away into the distance.

"He's gone," observed Sandra unnecessarily. "What a peculiar man."

"I just hope he knows what he's doing." Richard, prodded at the baby's flesh as if testing a joint of meat. "My God, we're a bit isolated out here—we can hardly call in a second opinion and there's not even a district nurse about."

"He'll be all right," Sandra predicted confidently, hugging the baby. "Stephen will be all right, won't you, my love," she crooned.

"Stephen? Stephen." He sa-

vored the sound. "Nice name. Where did you get it from? An old flame of yours?"

"For heaven's sake, Dick, you sound as if you've been drinking on an empty stomach again. It's my dad's name. You don't mind, do you?"

"Of course not. God, I was forgetting." He slapped his brow, laughed. "We haven't had anything to eat today. Christ, I'm sorry, darling. What can I get you? Chicken broth? Minced beef? A nice glass of milk?"

He tried not to grimace at the thought.

"I'm not an invalid, Dick. The usual will do. Roast pork or something like that, peas and so on—you know. But not too much, please."

"Right."

He left the house, squinted against the swirling cloud of settling dust that still marked the helicopter's recent departure and made for the barn and Daisy.

"I don't fancy it," said Sandra firmly a little while later, gazing with repugnance at the tray of food. "I don't really fancy it at all. Whatever possessed me to ask for roast pork I can't imagine. God, I've only just come out of labor. All I want to do, really, is to lie in the sun and take it easy."

"Good idea. I'll fix you up a place outside."

Taking the tray, he strode into the kitchen and tipped the contents

into the disposal unit. He pulled the mattress from the spare bed, carried it out and dropped it on the grass. He fetched a couple of blankets and a pillow, helped Sandra outside. She stretched out on the temporary bed with a sigh of contentment and took Stephen from him.

Sandra's lying in the sun with her transparent nightdress on looked suddenly strange. Richard moved to cover her with the blankets.

"Don't," she said, smiling placidly.

He wandered back indoors. The tray was on the kitchen table, where he had left it. How long was it since he had last eaten?

Three days? Four? He couldn't remember. The time lapse bothered him. Deciding that he would, in any event, have a good substantial supper later tonight, he drank the remains of his glass of home-made wine, then followed it with a glass of cold water. Presently, he began to feel hungry, just a little.

WHATEVER it is, it seems to be catching," said Sandra.

They were lying in the sun two weeks later. By now they had become used to the idea of nude sunbathing. After all, passers-by were a rarity. Stephen, fat and contented, lay between his parents. The day was hot and pleasant.

"You can almost see the sun moving," remarked Richard, gaz-

ing at the blue sky from between eyelids nearly closed.

"Do you think we've got some new kind of sunburn?" asked Sandra. "We do spend an awful amount of time lying out here, these days."

"Best thing for us," he reassured her, sitting up and examining the skin on his belly. It certainly was a peculiar color, a bilious light yellow, completely unlike the deep brown of an Earth suntan. Sandra's flesh was a similar color, as was Stephen's. But Stephen had always been like that. "It can't be suntan," he reminded her. "Stephen was born this shade. Maybe we've caught it from him."

"It's this artificial food from Daisy," Sandra said with sudden decision, ignoring Richard's conjecture. "Some sort of latent dye in the grass that isn't extracted by the processing."

"Could be," mused Richard. "That would explain Stephen, too, presumably. Anyway, it doesn't seem to do us any harm."

"Doesn't it? What about our loss of appetite?" She was growing worried. "And this tired feeling all the time. I have it—you complain of it. I tell you, Dick, I'm not happy about this. I've half a mind to get the doctor. In any case, we want to be right for when Mum and Dad come."

Richard groaned quietly to himself. He'd been trying to forget the forthcoming visit of Sandra's par-

ents. It had been a condition, almost, of their original emigration that Mr. and Mrs. Roberts should come and stay with them for a while once they were settled.

Sandra had been adamant.

Otherwise we can't go. I can't bear the thought of never seeing them again . . .

Richard himself had no difficulty in withstanding a permanent parting from his inlaws. He had unwisely said so. Sandra had reacted promptly.

I can't think why you don't like them. They're fond of you and they've been very good to us. You owe them a lot . . .

True, but the idea of a visit for an indefinite period was now—as it had been then—difficult for him to face. He could picture them looking over the place. Father-in-law, bluff and overly-hearty.

Very nice. Back to nature and all that. Commendable. I take it there's a good school locally for Stephen—in due course?

Mother-in-law, blue-rinsed and high-heeled.

Main drainage. I suppose, Sandra dear?

Oh, God, and they would be here in a few months at his expense. That would knock a hole in the savings.

He rose abruptly to his feet.

"Look, darling, I don't think we ought to take any chances. It wouldn't do for your parents to find a reason for endless questions

—or us ill. Let's drop this sunbathing, just in case. We've got to eat the food but at least let's keep out of the sun as much as possible, particularly Stephen. Then, if the skin condition doesn't clear up, whatever it is, we'll get the doctor."

Sandra gathered up Stephen.

"Perhaps you're right."

"It seems strange to be indoors like this," she said wonderingly a few minutes later. "Sort of unnatural when it's such a lovely day. There doesn't seem to be anything to do. When are you going to start the harvest, Dick?"

"I thought I might have a trial run with the machine after lunch to make sure everything's in working order. Then start properly tomorrow, or maybe the day after."

He knew no sense of urgency.

"Lunch?" she repeated uncertainly. "I suppose we must try to eat something."

LATER, feeling heavily full of food, Richard opened the barn doors wide, seated himself on the harvester. He pressed the starter and the engine coughed into life, bellowing loudly within the confines of the four walls. Smiling to himself, he felt for the gears. He enjoyed driving the huge machine. Perched on his seat some ten feet from the ground, he felt master of the whole planet. He couldn't wait to get at the grass, to see it swept into the maw of the baler by the

giant blades, to be compressed, wire-bound and ejected in his wake like bottles thrown from an ocean liner.

He paused, listening, hand on the gearstick. The note of the engine wasn't right. It was too shrill, as though the oil level were low and the pistons on the verge of seizing. Hastily he switched off.

Dismounting, he withdrew the dipstick from the sump, examined it, replaced it, puzzled. The oil level was high. He checked the gearbox, the level was correct there, too.

Shrugging, he climbed back into the seat and restarted the engine. It sounded smooth enough—there was no question of misfiring. Perhaps it was just over-revving a bit. Depressing the clutch, he engaged the gears.

He realized his mistake as soon as he released the clutch. He had, somehow, got the thing in top gear. The machine moved off, gathering speed and racing through the barn doors while he struggled to maintain control.

He caught sight of Sandra's startled face at the window as he sped past the homestead. Then he was on the open plain.

Presently he began to enjoy himself as the harvester moved swiftly across the grass at what was, in fact, its normal operating speed, the bales dropping regularly in its wake. The problem of the gears could wait until he got back to the

barn. Meanwhile he set a course for the McGowan place, humming softly to himself, the whirling blades flashing in the sun.

After a while the McGowan trees loomed ahead. He gripped the gear lever, deciding to try to engage a lower gear before turning. It would be a pity if he stalled out here, miles from home, unable to restart the machine in top gear and unable to find bottom.

The engine idled for a moment as he dipped the clutch. He blipped the throttle and shifted easily, slipping quietly into the next gear. Surprised, he momentarily studied the diagram on the dash. The position of the gears seemed all wrong, somehow. He released the clutch.

The harvester leaped forward at an incredible speed. The trees hurtled toward him. He threw himself out of the seat and crashed heavily to the ground as the harvester, out of control, smashed full-tilt into a tree and stopped dead, engine silent.

He lay on his back, dazed, his eyes full of azure sky. Across the vaulting blueness crept the golden orb of the sun, moving perceptibly as he watched.

"I'M GOING to call the doctor," said Sandra, sudden decisiveness in her voice.

"I'll be all right," protested Richard, hobbling to his chair and flopping down, glad to take the

weight off his feet for a while.

"It's not only you. Have you seen Stephen today?"

With a flush of guilt Richard climbed to his feet again. He had been so busy lately that he had hardly had time for family domestic problems. Three weeks had passed since his accident with the harvester. The first of these weeks had been entirely occupied in repairing the machine with the few tools at his disposal. Next he had resumed his belated harvesting of his own and the McGowan's grass. The work had further been slowed by the fact that his feet had started giving him trouble.

He limped painfully now into the bedroom and studied Stephen, who lay quietly in his cot.

"I'm sure he's not right," said Sandra. "He lies so limply, just crying a bit now and then—and he won't eat a thing. You know, he's gone downhill ever since we started keeping him indoors. It's as though there were something unhealthy about this house—"

"Nonsense." But Richard was concerned. Stephen had been getting along well up to three weeks ago despite his jaundiced color. At least he had been visibly putting on weight. Now, he seemed to be wasting away. "All right—call the doctor. He can have a look at my feet at the same time."

Sandra disappeared. Soon she returned, looking alarmed.

"I can't raise the doctor," she

said. "I can't seem to get anyone. The radio's gone wrong. All I get is a funny sort of interference."

This was serious. Without the radio they were completely cut off from outside help, should help be needed. Richard hurried into the living room and sat down before the instrument, turning the tuning dial slowly, listening intently.

The crackle of static faded at the dial setting for the daily newscast. Music of a sort, came out of the speaker—an odd, rhythmic beat like the rapid tick of a watch accompanied by feverish, high-pitched speaking. Or were what he took to be voices shrill instrument sounds?

"It sounds just a bit like one of those ancient steel bands," ventured Sandra.

"It's not right."

His stomach felt suddenly empty—his lungs seemed to clutch at his heart. The unearthly caterwauling from the radio was alien. No Earth-made record ever sounded like that.

Abruptly the sound ceased. But instead of the even tones of an announcer a shrill twittering came from the radio, rising and falling in the upper register.

"Something's happened to them," Richard said slowly.

"You mean like an—invasion?"

Sandra had a healthy dread of aliens, although there was no hostile planet within many light-years of Jade.

"I don't know. No, it can't be that. There would have been some warning, surely. How often do you listen to the radio? Frequently?"

"Hardly ever. It's ages since I last switched the thing on. There never seems to be time."

"So anything could have happened and we wouldn't know. Damn." He felt silent, thinking. "I'll just try the short-wave again," he said at last, flicking the switch.

He found the doctor's frequency, gave the call sign and waited.

The radio twittered, paused, twittered again.

"That's a voice," he said heavily. "It's a voice of some sort, talking. And I don't know what the hell it's saying. Christ. What's happened, Sandy?"

He rested his elbows on the table, staring at the radio, willing it to make sense.

FOR a long time they sat, pondering worriedly. At last Richard stood up, wincing as his feet took the weight.

"I'm going to have to go and find out what's happening—and see if I can get somebody to come look at Stephen."

"But it's miles to the next home-stead."

"I'll take the harvester. Should be able to make it in about six hours." He glanced out through the window. The sun was setting over the hills, the McGowan place

was a black dot in the distance. "I'll make a start at first light."

"Let's have a look at those feet of yours." Sandra, now that a decision had been made, became suddenly practical. "If anything happened to the harvester you couldn't walk."

She stood up and painfully crossed the room to the medicine cupboard.

"You, too?" asked Richard. "Are your feet going bad?"

"I didn't want to worry you, Dick. You had enough on your mind, with the harvest. Still—" she smiled briefly—"I'll treat your feet and you can treat mine. Then I'll have a look at Stephen's."

"Are his feet bad?"

"They looked sore this morning. I'll put some ointment on them. Off with your shoes."

Lying back in an easy chair, Richard allowed her to remove his shoes, then his socks.

"Careful," he said as she began to unwrap the bandaging he had bound around his feet that morning. As she worked his mind ran back over the events of the past weeks, puzzling over the various inconsistencies.

There was a simple explanation, terrifyingly straightforward. All reason told him it was impossible. He reminded himself that he had failed to inform Sandra of this idea of his because of its very impossibility—but the real reason for his silence was that the concept

scared him sick and he saw, even now, no point in frightening Sandra as well.

It was impossible, wasn't it, for different regions of a planet to operate on different time scales? Yet everything pointed to the fact that their movements were getting sluggish and their machinery had become too fast for them. All the same, he told himself, it was quite impossible for time to vary in kind in areas of the same special plane. The idea presented a contradiction in terms.

And yet those voices on the radio—he could have sworn they were human voices, speeded up.

Slowly Sandra unwrapped the thin muslin, baring the pad of lint on the sole of his left foot. Carefully she pulled the material away.

Groaning weakly, Richard gripped the arms of his chair, knuckles white, face twisted with agony, trying to speak. Then he slumped back in a dead faint.

"Sorry—oh, I'm sorry, Dick—"

Sandra stared in horror at the sole of Richard's left foot. The skin had peeled away with the lint—the flesh gleamed dark and raw and, sprouting out of the purple wetness, were thousands of tiny, threadlike white tendrils.

And despite her horror, despite the sight of her husband lying unconscious before her and the terrible realization that beneath her own flesh were multiplying similar abominations, her overlying sensa-

tion was one of relief that now none of them would be able to leave this place. She, Richard and Stephen could gratify the all-consuming demand of her being which had possessed her these last weeks like a voraciously addictive drug.

She wanted to take off her clothes, go outside and feel the hot fingers of the sun upon her hungry body.

III

THE days fled by. They sat in alternate light and darkness outside the homestead, the harvest forgotten, never venturing indoors save to fetch endless glasses of water. The sun burned down upon their bodies' darkening yellow, the cool night air soothed them for brief moments before the sun was back, arching across the sky—ever accelerating.

Stephen was improving rapidly. He lay quietly on a blanket at their feet growing stronger with every fleeting day. He was content, never demanding, accepting sips of water at frequent intervals—yet his body filled out, his limbs grew firm and strong.

A strange euphoria encompassed the family on the grass. The three rarely stirred—each was finding it hardly necessary even to breathe. Richard's slow thoughts were more and more occupied with his sense of voluptuous well-being to the exclusion of all abstract con-

cepts. One day when the sun was especially hot and pleasurable following a cool night that had left their bodies studded with dew like diamonds, he had begun to say something to Sandra and she had turned toward him to listen. He had uttered perhaps two words before he realized that his words didn't matter and that Sandra would make an effort to understand what he was driving at—and that anyway it was night again and the cold dew was coming.

He had intended to remark on the improvement in his feet, which were no longer raw and painful. He even lifted himself ponderously as the shadows circled smoothly around the two deck-chairs and, by nightfall, he had assured himself that the flesh had healed although the tendrils were still there, trailing a thousand long white threads from the soles of his feet.

He was aware of a vague longing he was unable to express in words and he looked at Sandra, picking his brief spell of daylight—she looked back at him and he knew she understood.

But now he could not summon his body to perform the walking movements necessary to carry him into the homestead and out again with more water, so he lay in the chair while the longing intensified—and with it came the slow knowledge that there was another, better way to satisfy this craving.

Stephen was the first to move.

His infant mind being less constricted by the habit of years, he was more readily able to adapt to the new circumstances and recognize the craving for what it was. He rolled slowly toward the edge of his blanket while his parents watched, wondering from unblinking eyes. His small body, now on the grass, assumed a foetal position and, with knees tucked under his chin he rolled again, kneeling and finally sitting crouched, his feet flat against the ground, his short arms hugging his knees.

Next Richard stirred, hands pushing at the frame of his chair, lifting his inert body from its resting place. Instinct was taking over in his case, too. His body folded, his chest and head moved forward so that for a long time he sat bent double on the edge of the chair, his hair flopped over his eyes. Gradually he became upright, left the chair and stood up.

His feet felt spongy and insecure at first. He shuffled them, shifting their position and working them through the grass into the soft soil until he stood firmly, circled by his wheeling shadow.

At last the tendrils on his feet probed moisture below the surface and the fluid rose into his body, satisfying a craving that had possessed him for days. Once again contentment stole through his senses and he felt his heart slow until it became an occasional spasmodic flicker.

Opposite him stood Sandra. She regarded him calmly.

After a long time he closed his eyes. His last conscious memory was of the wind in Sandra's hair, and he kept this memory with him as he slipped easily into half-sleeping Jade immortality.

SLOWLY, very slowly, realization came to him that he was lying in a horizontal position between linen sheets, his body clothed in some sort of pyjamas. He felt tired, deadly tired, but something in his system was forcing him into an artificial alertness when all he wanted was sleep.

"Wake up, Richard."

The voice came from all round him, so close that it might have been within his own head. The voice, like the nagging inducement in his body to awaken, was artificial. It did not arise through any volition of his own consciousness; it was forcing its presence upon him, mechanical and metallic, from an outside source. He didn't want the voice, so he kept his eyes closed and willed it to go away—but gradually the strength of his very willing became intensified, wakefulness rising in him like sap. He found himself hating the voice with a violence that made further sleep impossible. He opened his eyes.

"Wake up, Richard."

The voice spoke with dynamic forcefulness from a louvered open-

ing in a cabinet near his eyes. For a while he studied the cabinet, noting the vaguely familiar lines, the two reels in the recessed top.

He was lying on his side, he realized finally, and looking at a tape recorder beside the bed. He extended his field of vision and saw white walls and ceiling and a door that flickered strangely. He turned his eyes, following the sweep of the ceiling, seeing an angular contraption almost directly above him. From it was suspended a bottle of dark red fluid. Blood. A thin tube hung from the inverted neck of the bottle and disappeared beneath the blankets of his bed. As he watched, the level of the blood fell rapidly, far too rapidly, until the bottle was empty. He was aware of a curious flicker, accompanied by a noise so quickly gone that he only half-remembered it, and the bottle was full of blood again. Abruptly the room was dark and he could see no more.

Light came again soon and the position of the tape recorder had changed. The voice came from the speaker and the voice had changed too, to a slightly different pitch.

"I'm glad to see you're awake. Now, first of all, I want you to know that your wife and child are all right. You are in the Earth Rehabilitation Center and I am talking to you through this machine because for the time being you will not understand normal speech. My name is Dr. Svenson and from

time to time I sit beside you—on the chair you will see beside your bed."

Richard saw the chair and saw also that it was in almost constant jiggling motion. From time to time he thought he could make out a sitting, semi-transparent figure.

"I can't see you properly," Richard addressed the phantom.

A slow fear was beginning to flow through him, driving away his lethargy.

"That is because I am not always here," replied the tape recorder. "Time has accelerated for you. When you spoke I had time to replay your remark at high speed, then record my reply and play it back to you at reduced speed—but I don't suppose you noticed any time lag."

"How long am I going to be lying here like this?"

He felt completely cut off from all humanity, terribly alone.

"Not long by your standards," replied the voice evasively. "Such things are relative. You've had a bad time of it. Meanwhile you are under intensive treatment and for a while you will feel quite weak. You were lucky. You have been treated in time. Others were not so fortunate— Oh, good afternoon, Mr. Roberts. (faintly) Good afternoon, Doc. How are the patients? (loudly again) Coming along nicely."

The tape recorder appeared to be holding a conversation with itself.

Then the voice changed and Richard recognized the hearty tones of Sandra's father.

"How are you feeling, Richard? Just as well we paid you a visit to that damned planet of yours, wasn't it? Found you just in time. Gave us a turn, I can tell you, seeing you all standing there like damned statues. Always said there was something weird about the place— Anyway, I got you all out of there pretty damned quick, I tell you. And brought charges against the Jade Exploitation Company. Made them look pretty sick—"

Richard stopped listening.

God, I'll never hear the last of this. For the rest of my life he'll be telling me how he saved my life and Sandra's too . . .

He experienced a sudden longing to be back on Jade, standing quietly in the sun with Sandra and Stephen, experiencing no problems. His senses picked up his father-in-law's voice once more.

"Imagine conning folks like that. People were putting down their deposits and buying their farms, never knowing that the planet was incapable of supporting animal life. Ah, well, look before you leap, I always say—"

The voice of Dr. Svenson mercifully broke in and Richard had slipped again into a defensive state of apathy but now he made a great effort to communicate.

"What was wrong with Jade? What happened?" he asked.

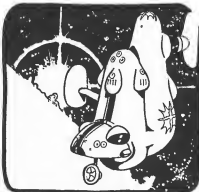
"You heard your father-in-law tell you that Jade is not capable of supporting animal life? This is quite true and it should have been obvious to the Exploitation Company—one would have thought that the absence of animals when they initially surveyed the place would have been sufficient to cause them to investigate further, at least. I'm not a bio-ecologist but I'm told that Jade's problem has something to do with the rigid composition of the basic organic molecules, which are not broken down when ingested into the human system. So the intake of these molecules in the form of food caused your own body cells to be gradually replaced by Jade-type cells of fundamentally plantlike construction. Your movements slowed, your thinking slowed, your machines seemed to move too fast for you. Toward the end, these effects were accelerating rapidly. But the most interesting effect came in the later stages when you began gradually to take in nourishment by photosynthesis. For increasing periods you lay in the sun, eating less and obtaining more of your requirements from the sun's rays, until the point was reached when your physical structure began to change and ciliate roots appeared on your feet, demanding to be buried in moist soil—"

Richard struggled with his slack
(Please turn to page 158)

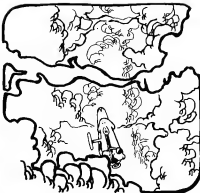
SUNPOT

by VAUGHN BODE ©1970 by VF BODE

THE FAT SUNPOT HANGS LIKE A SILENT TONSIL ABOVE BEAUTIFUL PLANET VENUS. BUT THE PLACID, NEVER-NEVERNESS OF SPACE IS AN ILLUSION. THE SUNPOT IS IN A NEW ORBIT WITH A PERIHELION OF 100 FEET!!



THE WHOLE SHIP IS POWERLESS SINCE THE REVOLUTION IN THE POWER FACTORY AT 8 O'CLOCK. A BAND OF VICIOUS WORKERS, LED BY A FANATICAL GYRO ENGINEER, HAD SEALED OFF THE MDA GYRO-BLOCK AND SET UP A CRUISION ORBIT WITH VENUS!



SUNPOT PLANET DIPS INTO THE VAST CANYONS OF CLOUDS AND SUBMERGES THROUGH LAYER AFTER LAYER LIKE A SKENT, GUIDING GHOST SHIP ON ITS WAY TO THE MYSTERIOUS SEA BOTTOM...

Dr. Electric Palavers With The Evil Rebels

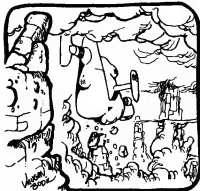
BELINDA BUMP,
GIVE ME THAT GOD-
DAMN PHONE...
DIS PRANK HAS
GONE FAR ENOUGH!



DIS IS DR. ELECTRIC
SPEAKING, YOU MAGGOT
INFESTED WORMS, YOU
SOWS' ASSES, YOU
MISERABLE ABORTIONS!

HEY, DOC, TAKE
IT EASY ON
THEM OR THEY'LL
NEVER GIVE UP
THE GYRO BLOCK!

THE SUNPOT PLANET IS GUIDING IN AT 20-
KNOTS, NOW, LESS THAN A MILE ABOVE VENUS...
THE WHEEL HOUSE DRIVERS TRY VALLANTLY
TO AVOID THE CRUMBLING SAND STONE
MOUNTAIN PEAKS... BUT NOT ALWAYS...

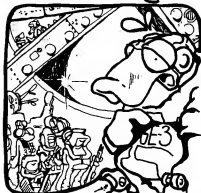


WELL, BIG SHOT, YOU
SPENT TEN MINUTES
SCREAMING LIKE A
MAD MAN AT THEM...
DID IT DO ANY GOOD?..

ERR... I.. ANH..
I HAD DAWDING
NUMBER... DAT
WAS HYDRONICS..

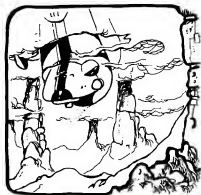
BOBO THE VIGILANT REBEL GIEF

OH, MAN,
HAS I GOT
US GUYS IN
A PECK OF
TROUBLE !!



BOBO, IT'S STUPID
DR. ELECTRIC ON DA
HORN SCREAMIN'
AN RANTING FOR US
TO SURRENDER...

AHH, YEAH, OKAY.
TELL HIM... ER, TELL
HIM WE GONNA GIVE
UP IF HE PROMISE NOT
TO KILL US...



SUNPOT IS AT ITS LOWEST POINT IN ORBIT... IF
THE DRIVERS CAN JUST STEER CLEAR OF THE ROCKS
AND DUNES THEY WILL START BACK UP AWAY
FROM THE SURFACE (THEIR ONE CHANCE
TO RECTIFY THEIR ERRATIC ORBIT)...



UNFORTUNATELY, AND
AS FATE AND ME
WOULD HAVE IT, A
GIANT DUNE LOOMS
OUT BEFORE THEM!

YARG!
A GIANT
LOOMING
DUNE!!

TO BE CONTINUED



THE SUNPOT PLANET CRUNCHES AND SMUNCHES ALONG THE SLOPING, LOOMING DUNE AND COMES TO A CREAKING, GRAVELLY HALT... SUNPOT HAS RUN AGROUND ON VIRGIN VENUS...

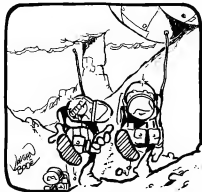
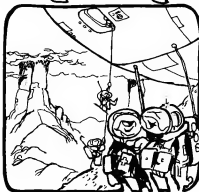


BOBO, DR. ELECTRIC SAY NEVER MIND GIVING UP HEADVISE US TO MAKE A RIN FOR IT ON THE SURFACE...

ESH! ME ANNY LOUSY, SUCKY IDEAS! ALL I WANTED WAS BETTER CHOW AN MORE TIME OFF... SMIE!

WOD! IT'S HOT AS A NIMPHOSIT OUT HERE! WHERE WE GONNA GO, BOBO?..

AW... I DON'T KNOW... OVER DAT WAY I GUESS... JUS' DON'T BOTHER ME... [BOY? WHAT A PICKLE]..



I'LL BET SOME SORT OF VENUSIAN LIFE FORM WILL COME AN SAVE US, OR WE'LL FIND A DUST UTOPIAN CIVILIZATION.

WHAT YOU MEANS IS WE'LL BE DEAD OF HEAT PROSTRATION, DEHYDRATION AND ASPHYXATION IN 5 HOURS.

The Editorial View

OVERKILL

One of the most widely read science-fiction novels of the past couple of decades was Nevil Shute's *On the Beach*, the story of the consequences of a nuclear war. Shute's war occurred in the northern hemisphere and killed everyone in Europe, Asia and North America. The people in his story are in Australia, and although they are survivors their life expectancy is small; the exchange between the northern and southern atmospheres is slow but it is inevitable, and radioactive fallout will kill them all within weeks.

On the Beach immediately provoked a storm of scientific argument. Its terrors were described as overdrawn. The scenarists of future debacles, like Herman Kahn, Edward Teller and others, asserted vigorously that no such total destruction of the human race was in the cards, and backed their arguments with reasonably reliable estimates and quite reliable facts. Although the stockpiles of atomic weapons possessed by the United States and the U.S.S.R. are huge, they are finite. Exploding every one of them over a period of a few days would produce catastrophic results, to be sure. But it would not produce the result of killing off

every living thing on earth, as Shute supposed. It would not even do so in the U.S. and U.S.S.R. themselves, presumably the prime targets for each other's missiles. How many Americans and Russians would survive is not very clear, but the number would be at least some millions of each. Enough (suggests Herman Kahn) so that over a period of a generation or so, at least the United States could rebuild itself to pre-war levels of affluence and technology.

Of course, this is not really an *attractive* prospect. But certainly it is a long way short of the total destruction that Shute imagined.

From these arguments the pro-Bomb side of the discussion drew much comfort. No one suggests that a nuclear war is a trivial event. But, by the above reasoning, it is not so dreadful that it can never under any circumstances be waged.

However, it now appears that all the evidence is not in. A physicist named Ernest Sternglass of the University of Pittsburgh has unearthed some new and pertinent information. It is not quite conclusive. It has even been denounced—by the Atomic Energy Commission, for example, on the grounds that it is “false, alarmist and unscientific.” More study is certainly **needed**. But its implications are **far-reaching** and should be looked into with great care.

We all know, to begin with, that the advance of medicine has greatly extended the average man's life. A few centuries ago in medieval France, the average age at the time of death was actually about a year and a half *less* than the average age at the time of marriage. This does not of course mean that most Frenchmen married eighteen months after they died. What it means is that so many Frenchmen died in infancy that they brought the average lifetime down below the average age at which those who survived the terrible infant mortality got married.

This is the principal way in which medicine has extended lifespans: by reducing the number of infant deaths.

If you draw a curve showing the average infant death rate in the United States from 1935 to 1950, you find a steady decline. Year after year, science saved more and more babies' lives through better medicine, better prenatal care, better diet, better everything.

If you make the same study from 1965 to the present, you find the same steady decline.

But if you draw your graph for the years 1950 to 1965, you see no such decline. For some reason, for those fifteen years infant death rates remained pretty much the same.

Why?

It is possible that the explanation is simply that for those fifteen

years medicine stood still, as far as caring for the newborn and the unborn is concerned. This does not seem a reasonable explanation, but it is a possible one. If it is true, it should be simple enough to demonstrate it through a study of pediatric practices over the last few decades.

Lacking confirmation of that particular hypothesis, it would appear that some other event must have been taking place. Some event which was killing babies by means that medicine was not able to prevent. Dr. Sternglass suggests that there was such an event, and it was the testing of nuclear weapons in the atmosphere, with their consequent release of radioactive materials and fallout.

In support of Sternglass's thesis there is a good deal of data. We know, for instance, that a 43-kiloton bomb test in Nevada in 1953 was followed by an increase in childhood leukemia in upstate New York. It is not certain that the first event caused the second; it is only certain that the test did take place, that fallout in the New York area did come from it, and that thereafter leukemia deaths did rise.

We know, too, that strontium-90, a major radioactive consequence of bomb testing, is chemically very similar to calcium. We know on the basis of chemical experiments and general scientific principles that the human body,

metabolizing calcium to build bones, will also metabolize a certain amount of strontium-90 and use it in the same way, if the strontium-90 is available in the environment. We know, too, that young children assimilate relatively more calcium (and thus strontium-90) than adults in this way, because their skeletons are still under construction. We know all this in theory, and it has been amply confirmed by investigation and experiment. The chain is quite complete. Bomb tests produce fallout. Fallout lands on pasture lands. Cows eat contaminated grass and produce strontium-90-laden milk. Infants drink the milk and deposit strontium-90 in their bones. Parents all over the country have cooperated for years in a mass sampling to test this hypothesis: they were asked to double up in their roles as Tooth Fairies, not only depositing a quarter under the child's pillow when a baby tooth came out but wrapping up the tooth itself and mailing it to a laboratory, where many thousands of them were assayed for their strontium-90 content. Which was found to be high. And we know finally that radiation of the kind produced by strontium-90 is capable of producing leukemia or bone cancer.

Similar arguments can be made for other kinds of fallout, and for other kinds of events which kill babies.

So here we have two sets of phenomena: between 1950 and 1965 there was widespread contamination of the environment by radioactivity from bomb testing; and also between 1950 and 1965, there was an otherwise inexplicable halt of the steady decline in infant mortality.

Is there a connection between the two sets?

Perhaps not.

But certainly it would take a peculiarly intransigent kind of stupidity to look at these two sets side by side and ignore them.

Freeman J. Dyson, on record as a strong partisan for ABM, says that Sternglass's evidence is not to be ignored. He says, "The evidence is not sufficient to prove that Sternglass is right. The essential point is that Sternglass *may* be right."

For, as Sternglass himself says, the logic of his study is such that it implies a problem that no one has previously considered, much less solved: "We find ourselves confronted with the utterly new situation in which, contrary to all our past thinking, even targets that are either not attacked, or are protected by an anti-ballistic missile system, can be destroyed if these 'targets' are people."

Sternglass's numbers imply that radioactive fallout is roughly a hundred times more dangerous to infants than had been suspected. They indicate that twice as many

babies died as should have died from normal causes during the test period. And they suggest that an all-out war might fail to destroy a nation's cities or population and still, to quote Sternglass again, "have the society come to an end as the infants born to the survivors

die within in their first year of life."

Perhaps T.S. Eliot had the answer. Perhaps all-out war means that the world ends not with the "bang" of Nevil Shute's *On the Beach* but with the "whimper" of the last surviving ancient. ★

FREDERIK POHL

★★★ GALAXY STARS ★★★

One of our favorite people is Robert Silverberg, author, editor, gourmet, wit, world traveler and a frequent contributor to GALAXY and IF. Back in 1956, Bob picked up a Hugo as the year's Most Promising New Writer and he has been accumulating honors ever since. Besides winning one of the prizes in the GALAXY Poll with his novelette *Nightwings*, Bob copped another Hugo for the same work at last year's St. Louiscon.

Bob is to be Guest of Honor at the World Science Fiction Convention next summer in Heidelberg, where he will deliver the major address. Preparing to launch this Berlitzkrieg, Bob is up to his umlauts in the study of German. Though the invitation is perhaps the highest tribute the sf fraternity can pay to one of its members, this will not be the first time Bob has been the honored guest at a convention. The gals from Pittsburgh fandom selected their hero as the first GoH of their regional con and he performed so nobly that they have designated him—get this—Guest of Honor Emeritus.

Besides logging many miles a year on the convention circuit, Bob and wife Barbara travel to the remote corners of Planet Earth, vacationing

and researching books. They were off to legendary Byzantium (Istanbul to the new wave bunch) in '67, stopping there on their way back from Jorslem. This trip produced the just published *If I Forget Thee, O Jerusalem*, a study of the role of American Jews in the creation of the state of Israel. While on a photographic safari of Africa in 1969, the Silverbergs even managed to stand on Zanzibar, from where they sent greetings to John Brunner.

The Silverbergs inhabit a large, rambling mansion in New York City, sharing the house with the family cats—four permanent residents and, frequently, litters of kittens. Barbara is an electronics engineer by profession, and it is she who fixes all the household appliances. "All," Bob says, "but the electric typewriter I don't have." Barbara recently edited an anthology of cat stories called *Kitten Caboodle*. Bob says he and Barbara were in Caboodle in 1963.

Our versatile Mr. Silverberg plans to continue "to explore the modes of contemporary fiction through the vehicle of science fiction." Those are his words and if you want to know what he means read *Son of Man*, due from Ballantine next fall.

volved. And this fact has long been known but for some reason no one, neither the police nor his mentors, has ever told Jud until after he gets into fatal trouble.

I find this very difficult to believe. I find it much easier to believe that Silverberg was making this up as he went along. The book is full of long pauses in which he talks his way out of one technical inconsistency at the price of sowing two others. I mean, there is time—there is infinite time—for all these accidents and blunders to have been forethought of and precorrected. And yet we find this civilization constantly risking its own existence for a few bucks in a tourist trade which, as described here, creates the extinction of a significant number of tour guides and tourists.

We could go on this way. Silverberg skirts around the issue of why the first tour guide to the Crucifixion didn't find the entire eastern Mediterranean region black with the flylike swarms of all the tourists who would be brought there in the future. He skirts around it again and again, apparently in the hope that not many people would care about his failure to come to grips with what happens when you try to pack infinity into a single event.

But I care. You see, there are only three alternative possibilities

here. One of them is that Silverberg doesn't realize his sf premise is shot full of holes, another one is that he doesn't care and the third one is that he not only doesn't care—he sees it as a virtue.

Obviously he does realize that his own technological premise is inconsistent. He signals this to you again and again. So we can gratefully discard that postulate and go on to the next.

Does he care? Is he glad if he doesn't care? Well, we don't know, except by inference from various statements that he's quit writing anything but what he wants to. And there may be something to be drawn, too, from the fact that he uses the premise, ramshackle though it is, in order eventually to club the book to its knees and call that an ending. Neither inference strikes me as conclusive.

Maybe he just wanted to write some passages about Constantinople and going to bed with Grandma. That would be a pretty smart-arse thing to do, though, considering how much auctorial effort and reader seventy-five cents are involved here.

It's a non-book. I guess that's what *Up the Line* is. It isn't sf—neither tech fiction nor any other previously recognized kind. It's a new kind of non-book. And as you may have gathered, it doesn't even find anything new in Grandma. ★

ogram of Krug as he whispered the words of the Transcender ritual. All five came to attention as Watchman entered.

The alpha hastily improvised a possible diversionary tactic.

Beckoning to one of the gammas, he said, "There is an enemy outside. With your help we will confuse him." Watchman gave the gamma careful instructions, ordering the android to repeat them. Then he pointed to the chapel's rear door, behind the altar, and the gamma went out.

After a moment for prayer Watchman returned to Leon Spaulding.

"You were told the complete truth," the alpha reported. "This is indeed a refrigeration dome. A team of mechanics is engaged in difficult recalibration work inside. If you enter you'll certainly disturb them and you'll have to walk carefully to sidestep some open traps in the floor. In addition you will be exposed to a temperature of minus—"

"Even so, I want to go in," said Spaulding. "Please let me get through."

Watchman caught sight of his gamma approaching, breathless, from the east. Unhurriedly, the alpha made as if to give Spaulding access to the chapel door.

In that instant the gamma rushed up, shouting, "Help! Help for

Krug! Krug is in danger! Save Krug!"

"Where?" Watchman demanded.

"By the control center! Assassins! Assassins!"

Watchman allowed Spaulding no opportunity to ponder the implausibilities of the situation.

"Come on," he said, tugging the ectogene's arm. "We have to hurry!"

Spaulding was pale with shock. As Watchman had hoped, the supposed emergency had blotted the problem of the chapel from his mind.

Together they ran in frantic haste toward the control center. After twenty strides Watchman looked back and saw dozens of androids rushing toward the chapel in accordance with his orders. They would dismantle it within minutes. By the time Leon Spaulding was able to return to this sector, the dome would house nothing but refrigeration equipment.

ENOUGH," Krug said. "It gets cold. Now we go down."

The scooprods descended. Snowflakes were beginning to swirl about the tower. The repeller field at the summit deflected them, sending them cascading off at a broad angle. It was impossible to run proper weather control here because of the need to keep the tunnel constantly frozen. A good

thing, Krug thought, that androids didn't mind working in the snow.

He throbbed with impatience. There was so much still to do before the tower could function.

Manuel said, "We're leaving, Father. We're booked into the New Orleans shunt room for a week of ego shifts."

Krug scowled.

"I wish to hell you stop that stuff."

"Where's the harm? To swap identities with your own true friends? To spend a week in somebody else's soul? It's harmless. It's liberating. It's miraculous. You ought to try it."

Krug spat.

"I'm serious," Manuel said. "It would pull you out of yourself a little. That morbid concentration on the problems of high finance, that intense and exhausting fascination with the challenge of interstellar communications, the terrible strain on your neural network that comes from—"

"Go on," Krug said. "Go. Change your minds all around. I'm busy."

"You wouldn't even consider shunting, Father?"

"It's quite pleasant," said Nick Ssu-ma. He was Krug's favorite among his son's friends, an amiable Chinese boy with close-cropped blond hair and an easy smile. "It gives you a splendid new perspective on all human relationships."

"Try it once, just once," Jed

Guilbert offered, "and I promise that you'll never—"

"Quicker than that I take up swimming on Jupiter," said Krug. "Go. Go. Be happy. Shunt all you like. Not me."

"I'll see you next week, Father."

Manuel and his friends sprinted toward the transmat. Krug rammed his knuckles together and stood watching the young men run. He felt a tremor of something close to envy. He had never had time for any of these amusements. There had always been work to do, a deal to close, a crucial series of lab tests to oversee, a meeting with the bankers, a crisis in the Martian market. While others gaily jumped into stasis nets and exchanged egos for week-long trips, he had built a corporate empire and now it was too late for him to give himself up to the pleasures of the world.

So what? he asked himself fiercely. *So what? So I'm a nineteenth-century man in a twenty-third-century body. So I'll get along without shunt rooms. Anyway, who would I trust inside my head? What friend would I swap egos with? Who, who, who?*

He realized that there was hardly anyone. Manuel, perhaps. It might be helpful to do a shunt with Manuel.

We'd get to understand each other better, maybe. Give up some of our extreme positions, move toward a meeting in the middle. He's not all wrong about how he lives.

I'm not all right. See things with each other's eyes, maybe?

But at once Krug recoiled from the idea. A father-son ego shift seemed almost incestuous. There were things he didn't want to know about Manuel. There certainly were things he didn't want Manuel to know about him. To swap identities, even for a moment, was out of the question. But what about Thor Watchman, then, as a shunt partner? The alpha was admirably sane, competent, trustworthy—in many ways Krug was closer to him than to any other living person. He could not think of any secrets that he had kept from Watchman. If he intended to sample the shunt experience at all he might find it useful and informative to . . .

Shocked, Krug crushed the thought. Trade egos with an android?

He said quickly to Niccolo Vargas, "Do you have some time, or you have to get back to the observatory right away?"

"There's no rush."

"We can go to the ultrawave lab now. They just set up a small working model of the prime-level accumulator. You'll be interested." They began to walk across the crisp, mossy tundra. A crew of gammas came by, driving snow-eaters. After a moment Krug said, "You ever try the shunt room?"

Vargas chuckled. "I've spent seventy years calibrating my mind so I can use it properly. I'm not

that eager to let somebody get into it and change all the settings."

"Exactly. Exactly. These games are for the very young. We—"

KRUG paused. Two alphas, a male and a female, had emerged from a transmat and were walking rapidly toward him. He did not recognize them. The male wore a dark tunic open at the throat, the female a short gray robe. A glittering emblem, radiating energy up and down the spectrum in steady pulsations, was affixed to the right breast of each. As they drew close Krug was able to see the letters AEP at the center of the emblem. Political agitators? No doubt. And he was caught out here in the open, forced to listen to their spiel. What splendid timing! Where was Spaulding, he wondered.

Leon will get them out of here fast enough . . .

The male alpha said, "How fortunate we are to find you here, Mr. Krug. For some weeks we have sought an appointment with you but it proved unattainable and so we have come—I should introduce myself first. Forgive me. I am Siegfried Fileclerk, certified field representative of the Android Equality Party, as no doubt you have already discovered by these emblems. My companion is Alpha Cassandra Nucleus, AEP district secretary. If we might have just a word with you—"

"—concerning the forthcoming

session of the Congress and the proposed constitutional amendment dealing with the civil rights of synthetic persons," said Cassandra Nucleus.

Krug was astounded by the audacity of the pair. Anyone, even an android of another employ, was free to come here via transmat. But to accost him like this, to bedevil him with politics—incredible!

Siegfried Fileclerk said, "Our boldness in approaching you directly is the outgrowth of the seriousness of our concern. To define the place of the android in the modern world is no slight challenge, Mr. Krug."

"And you, as the central figure in the manufacture of synthetic persons," said Cassandra Nucleus, "hold the key role in determining the future of the synthetic person in human society. Therefore we request you—"

"Synthetic persons?" Krug said, incredulous. "Is that what you call yourselves now? Are you crazy, telling me such things? Me? Whose androids are you, anyway?"

Siegfried Fileclerk stumbled back a pace, as though the vehemence of Krug's tone had shattered his amazing self-confidence, as though the enormity of what he was trying to do had burst upon his mind at last. But Cassandra Nucleus remained poised.

The slender alpha female said coolly, "Alpha Fileclerk is registered with the Property Protection

Syndicate of Buenos Aires and I am a modulator assigned to Labrador Transmat General. However, we are both in free-time periods at present, and by act of Congress Twenty-two hundred and twelve it is legitimate for us, when off duty, to carry on overt political activity on behalf of the rights of synthetic persons. If you would grant us only a short while to explain the text of our proposed constitutional amendment and to indicate why we feel it is appropriate for you to take a public position in favor of—"

"Spaulding!" Krug roared. "Spaulding, where are you? Get these maniac androids away from me—"

He saw no sign of Spaulding. The ectogene had wandered off on some sort of inspection tour of the site perimeter while Krug had gone to the tower's summit.

Cassandra Nucleus drew a glistening data cube from the bosom of her robe.

Holding it toward Krug, she said, "The essence of our views is contained in this. If you—"

"Spaulding!"

This time Krug's shout conjured up the ectogene. He came from the northern part of the site at a frenzied gallop, Thor Watchman running more smoothly beside him. As he approached Cassandra Nucleus showed alarm for the first time—in agitation she tried to press the data cube into Krug's hand. Krug

glared at it as if it were a psychobomb. They struggled briefly. To his surprise he found the android female in his arms in a curious counterfeit of a passionate embrace, though she was really only attempting to give him the cube. He caught her by one shoulder and pushed her away from him, holding her at arm's length. An instant later Leon Spaulding drew a small shining needler and fired a single bolt that penetrated Cassandra Nucleus' breast precisely in the center of her AEP emblem. The female alpha went spinning backward and fell without uttering a sound. The data cube, dropping from her lifeless fingers, bounced along the frozen earth; Siegfried Fileclerk, moaning, snatched it up. With a terrible cry of anguish Thor Watchman slapped the needler from Spaulding's hand and immediately afterward sent the ectogene toppling with a single savage thrust of his fist. Niccolo Vargas, who had looked on silently since the arrival of the two alphas, knelt beside Cassandra Nucleus, examining her wound.

"Idiot!" Krug cried, glaring at Leon Spaulding.

Watchman, hovering over the fallen Spaulding, muttered, "You could have killed Krug. She wasn't a meter away from him when you fired. Barbarian! Barbarian!"

"She's dead," Vargas said.

Siegfried Fileclerk began to sob. A ring of workmen, betas and

gammas, collected at a safe distance and looked on in obvious terror. Krug felt the world whirling about his head.

"Why did you shoot?"

Trembling, Spaulding said, "You were in danger—they said there were assassins—"

"Political agitators," Krug said, eyeing him with contempt. "She was only trying to give me some propaganda for android equality."

"I was told—" Shivering, crumpled, Spaulding hid his face.

"Idiot!"

Watchman said hollowly, "It was an error. An unfortunate coincidence. The report that was brought to us—"

"Enough," Krug said. "An android's dead. I'll take responsibility. She said she belonged to Labrador Transmat General. Spaulding, get in touch with their lawyers and—no, you aren't in shape to do anything now. Watchman. Notify our legal staff that Labrador Transmat has the basis for a tort action against us, destruction of android, and that we admit culpability and are willing to settle. Tell counsel to do what has to be done. Then get somebody from staff working on a press statement. Regrettable accident, that kind of thing. No political overtones. Clear?"

"What shall I do with the body?" Watchman asked. "Regular disposal procedures?"

"The body belongs to Labrador

Transmat," said Krug. "Freeze it for them. Hold it pending claim." To Spaulding he said, "Get up. I'm due in New York now. You come with me."

VII

WATCHMAN, as he walked toward the control center, went through the Rite of Balancing the Soul two full times before the numbness began to leave him. The hideous outcome of his ruse still stunned his spirit. He had been concerned only with getting Spaulding away from the chapel. It had not occurred to him that Spaulding might actually come upon Krug struggling with a possibly murderous stranger, nor that the ectogene was armed, nor that he was capable of taking life. But evidently Spaulding's frustration at being barred by androids from the alleged refrigeration dome had translated itself into murderous fury when he beheld an android apparently attacking Krug. And so the female alpha was dead. A slight error of aim and Krug might be dead now, too.

When he reached his office Watchman made the sign of Krug-be-praised eight times in succession and ran through half the sequences of codon triplets. These devotions calmed him. He put through a call to San Francisco, to the offices of Fearon & Doheny, Krug's chief counsel in liability cases. Lou Fear-

on, the Witherer Senator's younger brother, came on the screen. Watchman told him the story.

"Why did Spaulding shoot?"

"Hysteria. Stupidity. Excitement."

"Krug didn't order him to fire?"

"Absolutely not. The bolt came within a meter of killing Krug himself. And he was in no danger."

"Witnesses?"

"Niccolo Vargas, myself, the other AEP alpha. Plus various betas and gammas standing by. Should I get their names?"

"Forget it," said the lawyer. "You know what a beta's testimony is worth. Where's Vargas now?"

"Still here. I think he's going back to his observatory soon."

"Tell him to call me collect later in the day. I'll transmat out and take a deposition from him. As for that alpha—"

"Don't bother with him," Watchman advised.

"How so?"

"A political fanatic. He'll try to make capital out of it. I'd keep him away from the case if I could."

"He was a witness," Fearon said. "He'll have to be called. I'll neutralize him some way. Who owns him, do you know?"

"Property Protection of Buenos Aires."

"We've done work for them. I'll have Joe Doheny call and buy him for Krug. He can't very well make trouble for Krug if—"

"No," Watchman said. "Bad move. I'm surprised at you, Lou."

"Why?"

"This alpha is an AEP man, right? Sensitive on the issue of androids as chattels. We shoot down his companion without warning and then we try to buy him to silence him? How does that look? We'll make ten million new members for the AEP within twelve hours after he releases a statement to the press."

Fearon nodded bleakly. "Of course. Of course. Okay, Thor—how would you handle him?"

"Let me talk to him," Watchman said. "Android to android. I'll communicate somehow."

"I hope so. Meanwhile I'll call Labrador Transmat and find out how much they're asking in damages for the loss of their alpha girl. We'll settle this fast. You tell Krug not to worry. This time next week, it'll be as though the whole thing never happened."

Except that an alpha is dead, Watchman thought, breaking the contact.

HE WENT outside. The snow was falling more heavily now. Snow-eater teams were efficiently keeping the whole area clean, except for a circle some fifty meters in diameter centered on the place where the body of Cassandra Nucleus lay. They were carefully avoiding that. A light dusting of snow now cov-

ered her corpse. Beside her, motionless, whitening in the storm, stood Siegfried Fileclerk. Watchman went up to him.

"Her owner is being notified," he said. "I'll have some gammas carry her into storage until they call for her."

"Leave her here," Fileclerk said.

"What?"

"Right here, where she fell. I want every android working on this job to see her body. Hearing about a murder like this isn't enough. I want them to see!"

Watchman glanced at the dead alpha. Fileclerk had opened her robe. Her breasts were bare and the path of the needler's bolt was visible between them. It had seared a window through her chest.

"She shouldn't lie in the snow," he said.

Fileclerk compressed his lips.

"I want them to see. Watchman, this was an execution. A political execution."

"Don't be preposterous."

"Krug summoned his henchman and had her shot down for the crime of seeking his support. We both saw it. She posed no threat to him. In her enthusiasm she came too close to him while presenting our viewpoint, that's all. Yet he had her killed."

"An irrational interpretation," Watchman said. "Krug had nothing to gain by removing her. He sees the Android Equality Party as a mild source of harassment, not a

serious menace. If he had any reason for killing AEP people, why would he have let you live? Another quick shot and you'd have joined her."

"Why was she killed, then?"

"A mistake," said Watchman. "The killer was Krug's private secretary. He had been told that assassins were making an attempt on Krug's life. When he reached the scene he saw her grappling with Krug. It looked damning—I had the same view of things he had. Without hesitating, he fired."

"Even so," Fileclerk grunted, "he could have aimed for a leg. Clearly he's an expert marksman. Instead of wounding, he slew. He pierced her breast with great skill. Why? Why?"

"A flaw of character. He's an ectogene. He has powerful anti-android prejudices. Just a few moments before he had come into tense confrontation with myself and several other androids and he had been thwarted. Normally he boils with resentments—this time he boiled over. When he found that the 'assassin' was an android, he shot to kill."

"I see."

"It was his personal decision. Krug gave no orders for him to shoot at all, let alone to shoot to kill."

Fileclerk flicked snow from his features.

"Well, then, what will be done to punish this murderous ectogene?"

"Krug will reprimand him."

"I speak of legal punishment. The penalty for murder is personality erasure, is it not?"

Sighing, Watchman said, "For murder of a human being, yes. The ectogene merely destroyed some property belonging to Labrador Transmat General. A civil offense. Labrador Transmat will seek reparations in the courts and Krug has already admitted liability. He'll pay her full price."

"Her full price! Her full price! A civil offense! Krug to pay! What does the murderer pay? Nothing. Nothing. He is not even accused of crime. Alpha Watchman, are you truly an android?"

"My vat records are yours to consult."

"I wonder. You look synthetic but you think too much like a human."

"I am synthetic, Alpha Fileclerk, I assure you."

"But castrated?"

"My body is complete."

"I spoke in metaphor. You have been conditioned in some way to uphold the human point of view against your own best interests."

"I have had no conditioning except normal android training."

"Yet Krug seems to have bought not only your body but your soul."

"Krug is my maker. I yield myself fully to Krug."

S "SPARE me the religious nonsense." Fileclerk snapped. "A

woman's been killed out of hand, for no particular reason, and Krug's going to pay off her owners and that will be the end of it. Can you accept that? Can you simply shrug and say she was only property? Can you think of yourself as property?"

"I am property," Watchman said.

"And you accept your status gladly?"

"I accept my status, knowing that a time of redemption is to come."

"You believe that?"

"I believe that."

"You're a self-deluding fool, Alpha Watchman. You've built a cozy little fantasy that allows you to tolerate slavery, your own and that of all your kind, and you don't even realize how much damage you're doing to yourself and the android cause. And what happened here today doesn't shake your mind at all. You'll go to your chapel, and pray for Krug to liberate you. Meanwhile the real Krug was standing right on this patch of frozen ground, looking on while an alpha woman was shot to death, and your savior's response to that was to tell you to call his lawyers and arrange for settlement of a simple property-damage tort. Is this the man you worship?"

"I don't worship a man," said Watchman. "I worship the idea of Krug the Maker, Krug the Preserver, Krug the Redeemer. The

man who sent me to call the lawyers was only one manifestation of that idea. Not the most important manifestation."

"You believe that, too?"

"I believe that, too."

"You're impossible," Siegfried Fileclerk muttered. "Listen—we live in the real world. We have a real problem and we must seek a real solution. Our solution lies in political organization. There are now five of us for every one of them. More of us come from the vats daily while they scarcely reproduce at all. We've accepted our status too long. If we press for recognition and equality we'll have to get it, because they're secretly afraid of us and know that we could crush them if we chose to. Not that I'm advocating force, merely the hint of the threat of force, the hint of the hint, even. But we must work through constitutional forms. The admission of androids to the Congress, the granting of citizenship, the establishment of legal existence as persons—"

"Spare me. I know the AEP platform."

"You don't see the logic of it? After today? After this?"

"I see that humans tolerate your party and even find its antics amusing," Watchman said. "I also see that if your demands ever become anything more than token requests they'll abolish the AEP, put every troublesome alpha through a hyp-nolobotomy and, if necessary, exe-

cute the party leadership just as ruthlessly as you seem to think this alpha was executed here. The human economy depends on the concept of androids as property. That may change—but the change won't come your way. It can come only as a voluntary act of renunciation by the humans."

"A naive assumption. You credit them with virtues that they simply don't have."

"They created us. Can they be devils? If they are, what are we?"

"**THEY** aren't devils," said Fileclerk. "What they are is human beings who are blindly and stupidly selfish. They have to be educated to an understanding of what we are and what they're doing to us. This isn't the first time they've done something like this. Once there was a white race and a brown race and the whites enslaved the browns. The browns were bought and sold like animals and the laws governing their status were civil laws, property laws—an exact parallel to our condition. But a few enlightened whites saw the injustice of it and campaigned for an end to slavery. And after years of political maneuvering, of marshaling of public opinion, of actual warfare, the slaves were freed and became citizens. We take that as our pattern for action."

"The parallel's not exact. The whites had no right to interfere with the freedom of their brown-

skinned fellow humans. The whites themselves, some of them, finally came to realize that and freed the slaves. The slaves didn't do the political maneuvering and the marshaling of public opinion—they just stood there and suffered until the whites understood their own guilt. In any case those slaves were human beings. By what right does one human enslave another? But our masters made us. We owe our whole existence to them. They can do as they please with us—that's why they brought us into being. We have no moral case against them."

"They make their children, too," Fileclerk pointed out. "And to a limited extent they regard their children as property, at least while they're growing up. But the slavery of children ends when childhood ends. What about ours? Is there that much difference between a child made in bed and a child made in a vat?"

"I agree that the present legal status of androids is unjust—"

"Hurrah!"

"—but I disagree with you on tactics," Watchman went on. "A political party isn't the answer. The humans know their nineteenth-century history and they've considered and dismissed the parallels—if their consciences were hurting we'd have known it by now. Where are the modern abolitionists? I don't see very many. No, we can't try to put moral pressure on them, not

directly. We have to have faith in them, we have to realize that what we suffer today is a test of our virtue, our strength, a test devised by Krug to determine whether synthetic humans can be integrated into human society. I'll give you a historical example: the Roman Emperors fed Christians to the lions. Eventually the Emperors not only stopped doing that but became Christians themselves. It didn't happen because the early Christians formed a political party and hinted that they might just rise up and massacre the pagans if they weren't allowed religious freedom. It was a triumph of faith over tyranny. In the same way—"

"Keep your silly religion," Fileclerk said with sudden explosive intensity. "But join the AEP as well. So long as the alphas remain divided—"

"Your aims and ours are incompatible. We counsel patience. We pray for divine grace. You are agitators and pamphleteers. How can we join you?"

Watchman realized that Fileclerk no longer was listening to him. He seemed to draw into himself. His eyes glazed. Tears ran down his cheeks and flakes of snow stuck to the moist tracks. Watchman had never seen an android weep before, though he knew it was physiologically possible.

He said, "We'll never convert each other, I suppose. But do one thing for me. Promise that you

won't go around saying that Krug had her removed deliberately. Krug's potentially the greatest ally the cause of android equality has. He could save us with a single statement. But if you alienate him by smearing him with a ridiculous charge like that, you'll do us all tremendous damage."

Fileclerk closed his eyes. He sagged slowly to his knees. He threw himself on the body of Cassandra Nucleus, making dry choking sounds.

Watchman looked down silently for a moment.

Then he said gently, "Come with me to our chapel. Lying in the snow is foolishness. Even if you don't believe, we have techniques for easing the soul, for finding ways to meet grief. Talk to one of our Transcenders. Pray to Krug, perhaps, and—"

"Go away," Siegfried Fileclerk said indistinctly. "Go away."

Watchman shrugged. He felt an immense weight of sadness; he felt empty and cold. He left the two alphas, the living one and the dead, where they lay in the gathering whiteness, and strode off to the north to find the relocated chapel.

VIII

And the first that Krug brought forth was Gamma and Krug said unto him, Lo, you are sturdy and strong and you shall do all that is asked of you without protest and



you shall be happy as you work. And Krug loved Gamma so dearly that He made many more of him, so that there was a multitude of him.

The next that Krug brought forth was Beta and Krug said unto him, Lo, you shall be strong but you shall also have understanding and you shall be of great value to the world and your days shall be joyous and good. And Krug loved Beta so dearly that He spared him from the worst of the burdens of the body and spared him also from the worst of the burdens of the mind and the life of Beta was as a bright springtime day.

The last that Krug brought forth was Alpha and Krug said unto him, Lo, the tasks laid upon you shall not be light, for in body you shall exceed the Children of the Womb and in mind you shall be their equal and they shall lean upon you as though upon a stout staff. And Krug loved Alpha so dearly that He gave him many gifts, so that he might bear himself with pride and look without fear into the eyes of the Children of the Womb.

GOOD evening, good evening, good evening!" the alpha on duty at the New Orleans shunt room said as Manuel Krug and his companions emerged from the transmat. "Mr. Krug, Mr. Ssu-ma, Mr. Guilbert, Mr. Tennyson, Mr. Mishima, Mr. Foster. Good evening. Will you come this way?



Your waiting chamber is ready."

The antechamber of the New Orleans shunt room was a cool, tunnel-like structure about a hundred meters long, divided into eight sealed subchambers in which prospective identity-changers could wait while the stasis net was being prepared to receive them. The subchambers, though small, were comfortable: webfoam couches, elegant sensory-drift patterns on the ceiling, music cubes available at the touch of a switch, a decent variety of olfactory and visual channels in the wall and a number of other contemporary conveniences.

The alpha settled each of them in a couch, saying, "Programing time tonight will be approximately ninety minutes. That's not too bad, is it?"

"Can't you speed it up?" Manuel said.

"Ah, no, no hope of that. Last night, do you know, we were running four hours behind? Here, Mr. Krug—if you'll let me clip the electrode in place—thank you. Thank you. And this one? Good. And the matrix-scanner—yes, yes, fine. We're all set. Mr. Ssuma, please?"

The android bustled about the room, hooking them up. It took about a minute to get each one ready. When the job was done the alpha withdrew. Data began to drain from the six men in the waiting room. The stasis net was taking profiles of their personality contours, so that it could program it-

self to handle any sudden surge of emotion while the ego-shifts were actually going on.

Manuel looked around. He was tense with anticipation, eager to embark on the shifting. These five were his oldest, closest friends; he had known them since childhood. Someone had nicknamed them the Spectrum Group a decade ago, when by coincidence they showed up at the dedication of a new undersea sensorium wearing costumes of the spectral sequence of visible light: Nick Ssu-ma in red, Will Mishima in violet, and the others neatly arranged in between. The nickname had stuck. They were wealthy, though none, of course, was as wealthy as Manuel. They were young and vigorous. All but Cadge Foster and Jed Guilbert had married within the past few years but marriage was no bar to their continued friendship. Manuel had shared the pleasures of the shunt room with them on a dozen occasions. They had been planning this visit for over a month.

"I hate this waiting," Manuel said. "I wish we could plunge into the stasis net the minute we get here."

"Too dangerous," said Lloyd Tennyson. He was agile, long-legged, a superb athlete. Three mirror-plates gleamed in his high, broad forehead.

"That's the point," Manuel insisted. "The thrill of danger. To jump in boldly, instantly, hazard-

ing everything in one glorious leap."

"And the preciousness of irreplaceable human life?" asked narrowed, chalky-faced Will Mishima. "It wouldn't ever be allowed. The risks are well known."

"Have one of your father's engineers invent a stasis net that programs itself instantaneously," Jed Guilbert proposed. "That would eliminate both the danger and the waiting."

"If they could, they would," Tennyson pointed out.

"You could bribe an attendant to let you go in without a programming wait," Nick Ssu-ma suggested slyly.

"Tried it," Manuel said. "An alpha in the Pittsburgh shunt room three years ago. Offered him thousands. The alpha just smiled. I doubled the offer and he smiled twice as hard. Wasn't interested in money. I never realized that before—how can you bribe an android?"

"Right," Mishima said. "You can buy an android outright—you can buy a whole shunt room, if you like—but bribery's another matter. The motivations of an android—"

"I might buy a shunt room, then," Manuel said.

Jed Guilbert peered at him.

"Would you really risk going straight into the net?"

"I think so."

"Knowing that in case of an

overload or some transmission error you might never get back inside your own head?"

"What are the chances of that?"

"Finite," Guilbert said. "You've got a century and a half of life coming to you. Does it make sense to—"

"I'm with Manuel," Cadge Foster said. He was the least glib member of the group, verging on taciturnity, but when he spoke he spoke with conviction. "Risk is essential to life. We need to take chances. We need to venture ourselves."

"Pointless chances?" Tennyson asked. "The quality of the shunt wouldn't be any better if we went in immediately. The only difference would be that we'd eliminate the waiting time. I don't like the odds. To gamble a century in order to save a couple of hours? I'm not that bored by waiting."

"You might be bored by life itself," Nick Ssu-ma said. "So weary of it all that you'd stake a century against an hour just for the sake of diversion. I feel that way sometimes—don't you? There once was a game played with a hand weapon, a game called—ah—Swedish Roulette?"

"Polish," Lloyd Tennyson corrected.

"Polish Roulette, then. In which they took this weapon, which could be loaded with six or eight separate explosive charges, and loaded it with only one—"

Manuel disliked the trend of the conversation. Breaking in, he said sharply to Cadge Foster, "What's that thing you're playing with?"

"I found it in a niche under my couch. It's some kind of communications device. It says things to you."

"Let's see it."

FOSTER tossed it over. It was a gray-green plastic, vaguely cubical but beveled to a curve at most of the intersections of its faces. Manuel cupped it in his hands and peered into its cloudy depths. Words began to form, making a brilliant red strip across the interior of the object.

YOU HAVE FIFTY MINUTES
MORE TO WAIT

"Clever," Manuel said. He held it out for Nick Ssu-man to see. When he took it back the message changed.

LIFE IS JOY. JOY IS LIFE.
CAN YOU REFUTE
THAT SYLLOGISM?

"It isn't a syllogism," Manuel said. "Syllogisms take the form, All A is B. No T is A. Therefore, T is not B."

"What are you babbling about?" Mishima asked.

"I'm giving this machine a logic lesson. You'd think a machine would know—"

IF P IMPLIES Q AND Q
IMPLIES R, DOES
P IMPLY R?

"I've got one, too," Ssu-ma said. "Just to the left of the channel selector. Oh. Oh, my. Look at that!"

He showed his cube to Lloyd Tennyson, who emitted a guffaw. Manuel, craning his neck, still could not see the message. Ssu-ma held the cube so that Manuel could read it.

THE CHICKEN IS MIGHTIER
THAN THE PIE

"I don't understand it," Manuel said.

"It's an android dirty joke," Ssu-ma explained. "One of my betas told it to me a few weeks ago. You see, there's this hermaphrodite gamma—"

"We've all got them," Jed Guilbert announced. "It's a new thing for keeping people amused while they're waiting, I guess."

DEFEND THE FOLLOWING:
GOLD IS MALLEABLE
ALL ELECTRIC RADIOS
REQUIRE TUBES
ALL WHITE TOMCATS WITH
BLUE EYES ARE DEAF

"How does it work?" Manuel asked.

Cadge Foster said, "It's primed

to pick up anything we say. Then I imagine it relays a signal to a randomizing message center that picks out something vaguely relevant—or interestingly irrelevant—and feeds it onto the screen inside the cube.”

“And we each get a different message?”

“Nick’s and mine are the same right now,” Tennyson reported. “No—his is changing. Mine is staying—”

THE SUM OF THE ANGLES
OF A TRIANGLE IS 180°
THIS IS NOT BOTH A CHAIR
AND NOT A CHAIR
WHO SHAVES THE SPANISH
BARBER, THEN?

“I think it’s insane,” Mishima said.

“Maybe that’s the whole point,” said Manuel. “Is it handing out anything but gibberish?”

BECAUSE OF NECESSARY
CLIMATE ADJUSTMENTS
THE FOURTH OF NOVEMBER
WILL BE CANCELED
BETWEEN 32° and 61°
SOUTH LATITUDE

“I’m getting a news report on mine,” Guilbert said. “Something about your father, Manuel—”

“Let me see.”

“Here—catch—”

FEMALE ALPHA SLAIN
AT KRUG TOWER SITE.
POLITICAL EXECUTION,
AEP FIGURE CHARGES.
KRUG ORGANIZATION
DENIES CLAIM, ALLEGES

“More nonsense,” Manuel said. “I don’t think I find these things amusing.”

CLEVELAND LIES BETWEEN
NEW YORK AND CHICAGO

“I’m getting the news story on mine now,” said Tennyson. “What do you think it’s all about?”

ALPHA CASSANDRA NUCLEUS
DIED INSTANTLY.
THE FATAL BOLT WAS
FIRED BY KRUG’S
PRIVATE SECRETARY,
LEON SPAULDING, 38.

“Never heard of her,” said Manuel. “And Spaulding’s older than that. He’s been working for my father since—”

CAN THE RHYTHM OF
THE UNIVERSE’S BREATHING
BE DETECTED BY STANDARD
METABOLIC ANALYSIS?

“Perhaps you should call your father, Manuel,” Ssu-ma said. “If there’s really trouble—”

“And cancel the shunt? When we’re booked in here for a week?

I'll find out about it when I come out. If there's anything to find out."

ACTION FOR DAMAGES
HAS BEEN INSTITUTED BY
LABRADOR TRANSMAT GENERAL,
PROPRIETOR OF THE
DESTROYED ALPHA. EARLY
SETTLEMENT IS EXPECTED.

"Let's go back to syllogisms," Manuel told the cube he held. "If all men are reptiles, and alpha androids are reptiles—"

THE SUM OF THE PARTS
IS EQUAL TO THE SQUARE
ON THE HYPOTHESIS

"Listen to what mine says!" shouted Tennyson.

PANTING WITH DESIRE
SHE WAITS FOR THE
ARRIVAL OF HER COAL-BLACK

PARTNER IN UNSPEAKABLE SIN

"More!" Guilbert cried.
"More!"

THEREFORE, YOU ARE A REPTILE

"Can we put these things away now?" Manuel asked.

SHOWING DEEP EMOTION,
ALPHA SIEGFRIED
FILE CLERK OF AEP

ACCUSED KRUG OF PLAN-
NING A PURGE OF
ANDROID EQUALITY ADVOCATES.

"I think this really is a news broadcast," Cadge Foster murmured. "I've heard of this File-clerk. He's pushing a constitutional amendment that would open Congress to alphas. And—"

WEEPING AS THE DEAD
FEMALE ALPHA LAY IN
THE SNOW BESIDE
THE MIGHTY BULK OF
THE TOWER. AN ALMOST
HUMAN SHOW OF GRIEF.

"Enough," Manuel said.

He began to toss his cube to the floor but, seeing the message change, glanced at it once again.

DO YOU UNDERSTAND
YOUR OWN MOTIVES?

"Do you?" he asked.

The cube went blank. He dropped it gratefully. The alpha attendant entered the subchamber and started to disconnect the electrodes.

"You may proceed to the shunt room, gentlemen," said the alpha blandly. "The programing has been completed and the stasis net is ready to receive you."

THEY had moved the chapel to a dome near the outer rim of

the service area in a section where tools were repaired. In less than two hours a flawless transfer had been carried out. Inside, the new chapel was indistinguishable from the old. Within it Watchman found a dozen off-duty betas going through a ritual of consecration, a knot of gammas looking on. No one spoke to him or even looked directly at him—in the presence of an alpha they all scrupulously obeyed the code of social distances. Briefly Watchman prayed beneath the hologram of Krug. His soul was eased some, after a while, though the tensions of his long wintry dialogue with Siegfried Fileclerk would not leave him. His faith had not wavered before Fileclerk's brusque pragmatic arguments but for a few moments, while they were thrusting and parrying beside the body of Cassandra Nucleus, Watchman had felt the touch of despair's wings brushing his cheeks. Fileclerk had struck at a vulnerable place: Krug's attitude toward the slaying of the alpha. Krug had seemed so unmoved by it! True, he had looked annoyed—but was it merely the expense, the nuisance of a suit, that bothered him? Watchman had riposted with the proper metaphysical statements, yet he was disturbed. Why had Krug not seemed lessened by the killing? Where was the sense of grace? Where was the hope of redemption? Where was the mercy of the Maker?

The snow was slackening when Watchman left the chapel. Night had come, moonless, the stars unbearably sharp. Savage winds knifed across the flat, treeless expanse of the construction site. Siegfried Fileclerk was gone—so was the corpse of Cassandra Nucleus. Long lines of workers stood in front of the transmat banks for the shift was changing. Watchman returned to the control center. Euclid Planner, his relief man, was there.

"I'm on," Planner said. "Go. You stayed late tonight."

"A complicated day. You know about the killing?"

"Of course. Labrador Transmat's claimed the body. The lawyers have been all over the place." Planner himself eased into the linkup seat. "I understand the chapel's been moved, too."

"We had to. That's how it all started—Spaulding got too interested in the chapel. It's a long story."

"I've heard it," Euclid Planner said. He prepared to jack himself into the computer. "There'll be problems out of this. As if there weren't problems enough. Go with Krug, Thor."

"Go with Krug," Watchman murmured. He took his leave.

The outbound workers on the transmat line made way for him. He entered the cubicle and let the green glow hurl him to his three-

room flat in Stockholm, in the section of the android quarter favored by alphas. The private transmat was a rare privilege, a mark of the esteem in which he was held by Krug. He knew no other android who had one—but Krug had insisted that it was necessary for Watchman to be able to leave his apartment on a moment's notice and had had the cubicle installed.

He felt drained and weary. He set himself for two hours of sleep, stripped and lay down.

WHEN he awoke he was as tired as before. That was unusual. He decided to give himself another hour of rest and closed his eyes. But in a short while he was interrupted by the chime of the telephone. Turning toward the screen, he saw Lilith Meson. Sleepily he made the Krug-be-praised sign at her.

She looked somber.

She said, "Can you come to the Valhallavägen chapel, Thor?"

"Now?"

"Now, if you can. It's tense here. The Cassandra Nucleus thing—we don't know what to think, Thor."

"Wait," he said. "I'll be there."

He put on a robe, set the transmat coordinates for the Valhallavägen cubicle and jumped. It was a fifty-meter walk from the cubicle to the chapel; transmats were never installed inside a chapel. A feeble, strained dawn was breaking. In the night there had been a little snow

here, too, Watchman saw; the remnants of it fleeced the deep windowledges of the old buildings.

The chapel was in a ground-floor flat at the corner. Some fifteen androids were there, all alphas. The lower classes rarely used the Valhallavägen chapel, though they were free to do so. Betas felt uncomfortable in it and gammas preferred to worship in Gamma Town, far across the city.

Watchman recognized some of the most distinguished members of his kind in the group. He acknowledged the greetings of the poetess Andromeda Quark, the historian Mazda Constructor, the theologian Pontifex Dispatcher, the philosopher Krishna Guardsman and several others who were among the elite of the elite. All seemed ragged with tension. When Watchman made Krug-be-praised at them most of them returned the gesture halfheartedly, perfunctorily.

Lilith Meson said, "Forgive us for breaking your rest, Thor. But as you see an important conference is in progress."

"How can I help?"

"You were a witness to the slaying of Alpha Cassandra Nucleus," Pontifex Dispatcher said. He was heavy, slow-moving, an android of dignified and imposing bearing who came from one of the earliest of Krug's batches. He had played a major role in the shaping of their religion. "We have somewhat of a theological crisis now," Dispatcher

went on. "In view of the charges raised by Siegfried Fileclerk—"

"Charges? I hadn't heard."

"Will you tell him?" Pontifex Dispatcher said, glancing at Andromeda Quark.

The poetess, lean and intense, with an elegant, reedy voice, said, "Fileclerk held a press conference last night at AEP headquarters. He insisted that the killing of Alpha Nucleus was a politically motivated act carried out at the instigation of—" she could barely say it—"Krug."

"Slime of the Vat," Watchman muttered. "I begged him not to do that. Fileclerk and I stood talking in the snow half an hour and I told him—I told him—" He knotted his fingers. "Was there a statement from Krug?"

"A denial," said Mazda Constructor, who for four years had with Watchman's surreptitious aid been secretly compiling the annals of the androids from Krug's dead-storage data file. "An immediate response. The killing was called accidental."

"Who spoke for Krug?" Watchman asked.

"A lawyer. Fearon, the Senator's brother."

"Not Spaulding, eh? Still in shock, I guess. Well, so Fileclerk's been spewing filth. What of it?"

Softly Pontifex Dispatcher said, "At this moment chapels everywhere are crowded as your brothers and sisters gather to discuss the im-

plications of the killing, Thor. The theological resonances are so terribly complex. If Krug indeed did give the order for the ending of Cassandra Nucleus' life, did he do so in order to show His displeasure over the activities of the Android Equality Party? That is, does He prefer our way to theirs? Or, on the other hand, did He take her life to register His disapproval of the ultimate goals of the AEP—which of course are roughly the same as our own? If the former, our faith is justified. But if the latter, you see, then possibly we have been given a sign that Krug totally rejects the concept of android equality. And then there is no hope for us."

"**A** BLEAK prospect," croaked Krishna Guardsman, whose teachings on the relationship of Krug to android were revered by all. "However, I take comfort in the thought that if Krug struck Alpha Nucleus down to show His dislike of the equality movement, He did so merely to oppose political agitation for equality now and was in effect reminding us to be more patient and await His grace. But—"

"We should also consider a much darker possibility," said Mazda Constructor. "Is Krug capable of evil? Was His role in the killing a wicked one? If so, then perhaps the entire foundation of our creed must be reexamined and even rebuilt, for if Krug can act arbitrarily and im-

morally, then it surely follows—”

“Wait! Wait!” called an uneasy voice from the rear of the group. “No such talk as this in a chapel!”

“I speak only figuratively,” Mazda Constructor said, “with no blasphemies intended. We are trying to show Alpha Watchman the range of reactions now being demonstrated around the world. Certainly many of us fear that Fileclerk’s charges are correct—that Alpha Nucleus was put to death for her political views—and that has led to a consideration of the possibility that Krug has acted improperly. It is being discussed in many chapels at this very moment.”

“I think we have to believe,” said Krishna Guardsman, “that all acts of Krug are by definition good acts, leading us toward our ultimate redemption. Our problem here is not to justify Krug’s deeds but simply to quiet the unhappy suspicions of Krug’s motives that this Fileclerk, who is not even a member of our communion, has stirred up in those that are. We—”

“It was a sign from Krug! It was a sign!”

“The Vat giveth and the Vat taketh away!”

“Fileclerk said that Krug showed no remorse whatever. He—”

“—sent for the lawyers. A civil action—”

“—property damage. A tort—”

“—another test of our faith—”

“—she was our enemy in any case—”

“—killing one of His children to warn the rest of us? That makes Him a monster!”

“—in the fire of His crucible are we smelted—”

“—revealing an unsuspected capacity for murderous—”

“—sanctity—”

“—redemption—”

“—blood—”

“Listen to me” Thor Watchman cried, amazed and impatient. “Please. Please listen!”

“Let him speak,” Mazda Constructor said. “Of all of us he is closest to Krug. His words have weight.”

“I was there,” said Watchman. “I saw the whole thing. Before you destroy yourselves with conflicting theologies, listen. Krug bears no responsibility for the killing. Spaulding, the secretary, the ectogene, acted on his own. There is no other truth but this.”

In a cataract of words he told of Spaulding’s blustering attempt to force his way into the construction-site chapel, of the ectogene’s rising tension in the face of the resistance of the chapel’s guards, of his own ruse to draw Spaulding away from the chapel, of the unhappy result when Spaulding discovered Krug beset by the AEP agents.

“This is deeply reassuring,” said Mazda Constructor when Watchman was done. “We have been mis-

led by Fileclerk's accusations. This is not an issue of Krug's actions at all."

"Except in the deeper sense that Krug must have constructed the entire sequence of events," Krishna Guardsman suggested.

"Can you seriously maintain that His will underlies even the secular events of—" Pontifex Dispatcher began.

Mazda Constructor cut him off. "We can debate the intricacies of His will another time. At present our task is to communicate with all other chapels, to transmit Thor's account of the events. Our people everywhere are in unrest—we must calm them. Thor, will you dictate your statement so that it can be coded and transmitted?"

"Certainly."

Andromeda Quark handed him a message cube. Watchman repeated the story after first identifying himself, explaining his relation to Krug and swearing to the authenticity of his version of the events. A terrible

fatigue hammered at him from within. How eager these brilliant alphas were, he thought, to engulf everything in a mist of theological disquisition! And how quick to accept Fileclerk's lies. In thousands of chapels just now, hundreds of thousands of devout androids were agonizing over the question of why Krug had allowed an alpha to be shot to death in His arms, whereas, if they had merely waited to learn the truth from someone who had been present—

Well, it was not too late to undo the harm. No one's faith in Krug need be shaken by what had occurred.

Andromeda Quark and another female, both members of the Projector caste, were already at work coding the beginning of Watchman's statement for transmission over the broad-band network that linked every chapel to every other one. Watchman remained long enough to hear the first few phrases of his coded statement go forth:

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ACC CUC—

"May I go?" he said.

Pontifex Dispatcher gave him the sign of the Blessing of the Vat. Watchman returned it and, aching, departed.

TO BE CONTINUED

WHATEVER BECAME OF THE MCGOWANS?

(Continued from page 125)

muscles, making deliberate attempts to move.

"I want to see my wife and child," he requested weakly.

"Well done," said Dr. Svenson. "Keep thinking, keep talking. And above all, keep trying to move about a bit. We can't exercise you properly—normal exercise would be meaningless in relation to your muscles—you can only help yourself. What we can do is keep your bloodstream flushed out with new blood and pump you full of anti-coagulants and let time do the rest. Your wife and child? Turn over. By yourself."

He shifted his body inch by inch, rolling very slowly to lie on his back. He turned his head painfully, the neck muscles stiff from disuse and, during a period of less than a day, came to face in the opposite direction. Sandra was watching him from the next bed.

"Hello, Dick," she said carefully and smiled uncertainly.

And he understood her without a translating machine. He spoke to her and no longer felt alone. Night

came and went—another and another in rapid succession—and her hair was becoming brown again and the sallow tint was fading from her skin.

Looking at her lying on the iron bed in the severely appointed, rectangular room, he remembered with vivid clarity the last time he had seen her, standing, facing him on Jade, Stephen crouching motionless at her feet. Again he was watching the slender shape of her body, the serene, unchanging expression of her face, the dancing of her emerald hair in the occasional light breeze—and in the aching memory of the timeless scene he felt a sense of loss.

But behind the silken green of Sandra's hair he could see the feathery green plumes of the four trees beside the neighboring farm and he knew, as surely as he knew anything, what had become of the McGowans.

And the lively smile on Sandra's face as she lay in the hospital bed told him that immortality has its drawbacks. ★

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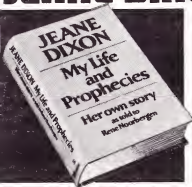
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